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A Consumer Staples behemoth - The acquisition of Kimberly-Clark by Kraft-Heinz

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Abstract

The main purpose of this dissertation is to study the hypothesis of an acquisition in the consumer staples sector, between Kraft-Heinz (the acquirer) and Kimberly-Clark (the target). Kraft-Heinz is a consumer staples company that recently completed the integration of a past merger, and is rumored to be looking for new targets to acquire. Its owners traditionally seek to acquire companies within the same industry, with strong brands and improvable operating margins. Kimberly-Clark is a company belonging to the consumer staples industry and the owner of several well-known brands. While it is smaller than Kraft-Heinz, it is expected to generate higher revenue growth in the foreseeable future, and its operational profitability possesses room for improvement. The combination of the two companies would allow for small increments in revenues, through combined scale and market power, and lead to operational improvements in Kimberly-Clark, following the Kraft-Heinz' battle-hardened methods and culture. The combined company would also invest heavily in state-of-the-art facilities, while divesting older plants and reducing work-force. The expected synergies arriving from the deal were valued at $28 906 Million. The transaction assumes an all-cash friendly offer of $49 888 Million for 100% of Kimberly-Clark, representing a premium of 40.8% over Kimberly-Clark's stock price.

Abstrato

O principal objetivo desta dissertação é estudar a hipótese de uma aquisição no setor dos bens de primeira necessidade, entre a Kraft-Heinz (o comprador) e a Kimberly-Clark (o alvo). A Kraft-Heinz é uma empresa do setor de bens de primeira necessidade que recentemente finalizou a integração de uma fusão anterior, e correm rumores de que se encontra à procura de novas empresas para adquirir. Os seus donos procuram tradicionalmente adquirir empresas dentro da mesma indústria, com marcas reconhecidas e margens operacionais que possam ser melhoradas. A Kimberly-Clark é uma empresa pertencente ao setor dos bens de primeira necessidade e dona de várias marcas famosas. Embora seja mais pequena que a Kraft-Heinz, é espectável que obtenha uma maior taxa de crescimento das suas receitas, e a sua rendibilidade operacional possui margem para melhorias. A combinação das duas empresas irá permitir pequenos incrementos nas receitas, através de economias de escala e aumento do poder negocial, e também a melhoria operacional da Kimberly-Clark, através da aplicação da metodologia e cultura organizacional da Kraft-Heinz. A empresa combinada irá também investir fortemente em fábricas topo de gama, ao mesmo tempo que irá descontinuar fábricas antigas e reduzir a sua força de trabalho. As sinergias resultantes da transação são avaliadas em $28 906 Milhões. A transação assume uma oferta amigável, totalmente em numerário, de $49 888 Milhões, por 100% da Kimberly-Clark, o que representa um prémio de 40.8% acima do preço atual das suas ações.

Keywords: Acquisition, Synergies, Premium, Consumer Staples

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LIST OF ABBREVIATIONS

M&A	Mergers and Acquisitions
GISC	Global Industry Classification Standard
LBO	Leveraged Buyout
DCF	Discounted Cash Flow
EV	Enterprise Value
FCF	Free Cash Flow
FCFF	Free Cash Flow to the Firm
WACC	Weighted Average Cost of Capital
APV	Adjusted Present Value
CAPM	Capital Asset Pricing Model
YTM	Yield to Maturity
PV	Present Value
NPV	Net Present Value
ITS	Interest Tax Shield
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
EBIT	Earnings Before Interest and Taxes
PMI	Post-Merger Integration
NOPLAT	Net Operating Profit Less Adjusted Taxes
ROIC	Return on Invested Capital
RONIC	Return on New Invested Capital
ROA	Return on Assets
D/E	Debt-to-Equity ratio

COGS	Cost Of Goods Sold
Gross Margin	COGS / Total Revenues
EBITDA margin	EBITDA / Total Revenues
EBIT Margin	EBIT / Total Revenues
NOPLAT margin	NOPLAT / Total Revenues
SG&A	Selling, General, and Administrative Expenses
PPE	Property, Plant, and Equipment
NPPE	Net Property, Plant, and Equipment
GPPE	Gross Property, Plant, and Equipment
Payout Ratio	Dividends/Net Income
Capex	Capital Expenditures
Interest Coverage Ratio	EBITDA / Interest Expenses
PPA	Purchase Price Allocation
NCI	Non-Controlling Interests
U.S.	United States of America

1. Introduction

In early 2017, The Kraft-Heinz Company announced its intention to acquire Unilever. The transaction failed, but signaled Kraft-Heinz' intentions of acquiring another company in the Consumer Staples sector.

In this dissertation, the hypothesis of Kraft-Heinz acquiring Kimberly-Clark Corporation, the owner of brands such as Huggies ® and Scottex ®, is studied. Both companies are studied and evaluated as stand-alone businesses, and as a combined firm, created by the acquisition of the latter by the former. To analyze the combined company, a special emphasis is given to the synergies that could emerge from the transaction.

In Chapter 2, a review of the existing literature on the topic of Mergers and Acquisitions, is performed, covering topics ranging from the reasons behind M&A, to valuation techniques, and post-merger integration.

In Chapter 3, the industry in which both companies operate is analyzed, with a focus on its business segments, competition, and future outlooks.

Next, in Chapter 4, each company is introduced, with a brief historical analysis.

Chapter 5 is dedicated to the valuation of each firm as a stand-alone business. To this end, each firm's financial statements are projected for next fifteen years, and a detailed explanation on the process and assumptions made is presented. Each company is subsequently valuated using three different and complementary techniques.

In Chapter 6, the rationale behind the transaction is presented. Chapter 7, in turn, is solely dedicated to the synergies created by the deal and to the valuation of the combined company.

Chapter 8 discusses the negotiation process, and attention is given to the price to pay for the acquisition, the sources of financing, the method of payment, and how to approach the target. Chapter 9 is dedicated to post-merger integration.

Finally, Chapter 10 presents the final arguments and concludes this dissertation.

2. Literature Review

2.1. M&A

2.1.1. Why it happens

Before delving deep into the details of the transaction encompassed in this dissertation, it is appropriate to give an introduction to the phenomenon of M&A.

M&A activity seems to happen in waves, as described by (Martynova & Renneboog, 2008) and (Golbe & White, 1993). Those waves tend to have in common falling interest rates, increases in the stock markets (Melicher, Ledolte, & D'Antonio, 1983), and being followed by periods of economic expansion (Martynova & Renneboog, 2008). Other factors that influence M&A waves are managerial pride, herding behavior displayed by managers, and the correction of governance problems (Bruner, Applied Mergers & Acquisitions, 2004).

(Bruner, Applied Mergers & Acquisitions, 2004) argues that economic turbulence plays a central role in the surge of M&A activity. Economic turbulence, in the form of industry shocks such as deregulation and technological change, break the *status-quo* within the affected industries, which forces firms to adapt. Being M&A one of the cards in the firms' sleeves, an increase in takeover activity then takes place. (Mitchell & Mulherin, 1996) findings give further proof of this theory.

2.1.2. How it benefits society

Having established why takeovers happen, it is relevant to analyze how they are beneficial for the society.

There is a substantial amount of literature on how takeovers create or destroy value for the parties involved in the transactions. (Jensen & Ruback, The Market for Corporate Control: The Scientific Evidence, 1983) and (Bruner, Where M&A Pays and Where It Strays: A Survey of the Research, 2004) summarize that target firm's shareholders benefit from M&A and acquirer's shareholders, on average, at least do not lose. After mergers, firms typically show an increase in productivity and better operating margins, when compared to their peers (Healy, Palepu, & Ruback, 1992) and, drawing from (Mitchell & Mulherin, 1996), are better equipped to cope with economic change in their respective industries. On top of the previously mentioned

gains, the society as a whole benefits from an increased economic efficiency and a better allocation of resources (Jensen, Takeovers: Their Causes and Consequences, 1988).

2.1.3. Synergies

The reason for the gains above mentioned, arising from M&A activity, can be attributed to synergies.

Synergies are defined as the additional value generated when two firms are combined, creating something that would not be possible had the two firms decided to stay independent (Damodaran, The Value of Synergy, 2005). The said synergies usually come in one of two forms, revenue improvements and cost improvements. Cost synergies, such as eliminating overlapping operations, are usually more likely when the two companies involved in the process operate in similar businesses and have similar capabilities. On the other hand, revenue synergies, such as higher growth, are more likely when the two companies possess different capabilities and have access to different markets (Sirower & Sahni, 2006).

When valuing a target, the acquirer focus on the value it can create through the combination of the two firms, value which plays a key role in determining the amount paid for the acquisition. However, estimating such performance improvements can be a daunting task, prone to errors of method and of reasonableness. For the effect, (Roll, 1986) documents how managers, even if believing to be acting on the best interest of shareholders, are prone to overvaluation of the targets due to overconfidence in their own skills.

Due to the high probability of overvaluation of synergies, target's shareholders are usually the ones who gain the most in corporate takeovers. As (Jensen & Ruback, The Market for Corporate Control: The Scientific Evidence, 1983) puts it, target's shareholders gain from M&A activity, while acquirers' at least do not lose. Thus, when evaluating a deal, practitioners should proceed with care, avoiding the temptations of overconfidence and unreasonable prospects. (Sirower & Sahni, 2006) propose a method of evaluating the reasonableness of synergies, as well as the likelihood of overpayment, based on the relationship between premium paid, target's pre-announcement market value, profit margin, and effective tax rate.

2.1.4. M&A in Consumer Staples

According to Thomson Reuters Eikon and the Global Industry Classification Standard, both companies focused in this dissertation fall into the Consumer Staples sector. As so, it seems relevant to analyze how M&A can generate economic gains in the above-mentioned sector. Being a mature industry, with limited growth potential in developed markets and where economies of scale play a pivotal role in value creation, it is expected that companies in the sector will continue the ongoing process of consolidation and expansion of their global presence, building global giant firms in the process (Deloitte, 2017).

(Shivdasani & Zak, 2007) argue that particular elements of the Private Equity approach to LBOs, namely the relentless pursuit of higher operational margins, can be applied to public companies in mature sectors, such as Consumer Staples, in order to create value for shareholders. Being the acquirer of the proposed transaction analyzed in this dissertation a firm controlled by a Private Equity group, 3G Capital, famous for its ability to increase operational performance (Daneshkhu, Whipp, & Fontanella-Khan, 2017) and being the possible failure in cost-cutting one of the most challenging risks for the target company in this proposed transaction (Kimberly Clark Corporation, 2018), a reasonable match between acquirer and target seems likely.

2.2. Valuation Methods

Valuing each firm involved in a takeover process, as well as the synergies arising from the transaction, is a crucial step of every M&A procedure. In the next few pages, a summary of the main valuation techniques is presented, as well as a comparison between them.

2.2.1. Discounted Cash Flow methods

The Discounted Cash Flow methods are, as the name says, based on the idea that an enterprise is worth today the sum of its future cash flows, discounted to the present by a discount rate that appropriately measures the riskiness of those cash flows.

$$Enterprise\ Value = \sum_{t=1}^{n} \frac{FCFF_t}{(1+k)^t}$$

The great difference between the main DCF methods, both covered in the next few pages, lies specifically on the discount rates used for the process.

2.2.1.1. Weighted Average Cost of Capital

The WACC method values the firm by discounting the future cash flows generated by the whole firm by a discount rate that represents the risks faced by all of the firm's investors. The WACC blends together the cost of capital required by debtholders (k_d) and the required return demanded by equity holders (k_e). Its formula is presented below.

$$WACC = \frac{D}{V} k_d (1 - T_m) + \frac{E}{V} k_e$$

To obtain the required return demanded by equity holders, several methods can be used, being the most popular ones the CAPM of (Sharpe, 1964) and (Lintner, 1965) and the Fama-French 3-Factor model (Fama & French, 1992). The firm's cost of debt should be estimated using the YTM of the firm's outstanding debt (Koller, Goedhart, & Wessels, 2015).

2.2.1.2. Adjusted Present Value

Following the work of (Modigliani & Miller, 1958), the APV method values the firm as the sum of its value if all equity-financed, plus the present value of interest tax shields.

$$EV = (Value\ if\ All - Equity\ Financed) + PV\ (Interest\ Tax\ Shields) \\ - PV\ (Expected\ Costs\ of\ Financial\ Distress)$$

Similar to the WACC method, while using the APV the value of the firm is still the sum of its future cash flows, discounted to the present. The great difference happens on how the future cash flows are discounted. In the APV method, the firm's operations are valued at an unlevered cost of equity (k_u) .Then, the present value of Interest Tax Shields, discounted at an appropriate rate that reflects their riskiness, is added to the value of the firm's operations, to arrive at the effective value of the firm. The ITS represent the positive effects of leverage in the capital structure. However, increased leverage is often accompanied by increased likelihood of financial distress, which should also be reflected when computing the EV. It should be noted

that financial distress costs differ from industry to industry, with some industries losing more value in the event of distress than others (Passov, 2003).

2.2.2. The Method of Comparables

While DCF methods are more flexible and allow for better tailoring of the needs of each valuation, other methods are often deployed as alternatives or, even better, as a compliment to DCF valuation.

One such method is method of Comparables, or Multiples. This method relies on the idea that similar assets should be priced in similar ways. As so, when valuing a firm, benchmarking its value against the value of similar firms should yield insightful prospects.

Some of the most common multiples include the Price-to-Earnings (P/E) and the Enterprise Value-to-EBITDA (EV/EBITDA). P/E is a commonly used multiple because of its simplicity of construction and interpretation. One just has to divide the firm's share price by its Earnings-Per-Share (EPS), and a useful measure is obtained. However, the P/E is subject to some criticism. On one hand, earnings are easily distorted. On the other hand, since it is calculated using flows to equity holders, it is directly affected by the firms' choice of capital structure. Because of this, EV/EBITDA is thought to be a better measure. It is also simply built, by dividing the Enterprise Value of a firm by its Earnings before Interest, Taxes, Depreciation, and Amortization. But, because the measure of flow, EBITDA, is calculated prior to interest expenses, it is unaffected by capital structure, thus providing a better measure of comparison.

Since the value added by a Comparables valuation comes from the comparison of a firm to its peers, a carefully-selected group of peers plays a key role on the insightfulness of such a method. One should proceed with extra care when selecting the set of peers, and rely on several measures to determine if a company is a good peer.

2.2.3. Remarks on the usage of each method

Each of the methods mentioned above has its strengths and weaknesses. While (Luehrman, 1997) argues that APV is a better method than WACC because it forces the practitioner to break the components of value creation and analyze each one of them separately, in theory both methods should yield similar results if properly applied. APV seems to gain the upper hand in

cases where the firm's capital structure is expected to change drastically during the valuation period. This happens because the WACC method relies on the assumption of a stable capital structure. While it is possible to deal with this issue, and use WACC with changing capital structures, as demonstrated in (Damodaran, Investment Valuation: Tools and Techniques for Determining the Value of Any Assets, 2012), the act is troublesome.

Despite not being the most valuable method in the toolbox of practitioners, Comparables also play an important role in valuing enterprises. For instance, (Kaplan & Ruback, 1996) show that while DCF methods provide more accurate measures of value, combining DCF with Comparable-based methods improves the quality of valuations. (Koller, Goedhart, & Wessels, 2015) provide similar recommendations.

2.3. Form of Payment

The form of payment for a corporate takeover can have a relevant impact on how the gains from the process are distributed among the Acquirer's and the Target's shareholders. When the payment is done exclusively in cash, the entire risk of the transaction is borne by the Acquirer. Alternatively, paying for a deal with acquirer's stock allows for the spreading of risk between the two parties. However, since the seller is exposed to risk, it is more likely to demand higher compensation. Confirming this rationale, (Bruner, Applied Mergers & Acquisitions, 2004) summarizes 12 studies of announcement returns based on form of payment and finds that Target's shareholders returns are materially higher when the payment is in cash. While still positive when the deal is paid in stock, the returns for Target's shareholders are nevertheless lower than in cash deals.

Nonetheless, there are several factors that influence the choice of payment method. According to (Martin, 1996), when the Acquiring firm has plenty of investment opportunities, it is more likely to pay in stock, as a way not to divert funding from said investment opportunities. Furthermore, the Target firm is more likely to accept being paid in stock when the Acquirer has investment opportunities abound. The cash balance of the Acquirer also plays a role in the form of payment. Firms with large amounts of excess cash are naturally more likely to pay for acquisitions in cash.

2.4. Approaching the target

When approaching the target firm, an acquirer can be either friendly or hostile. Friendly approaches usually involve negotiation between the two firms' management teams while hostile bids are usually made directly to the target's shareholders. Given the amount of takeover defenses that the target's management team can raise (poison pills, leveraged recapitalizations, etc.), one would expect hostile takeovers to provide lower returns for the Acquirer. However, research summarized in (Bruner, Where M&A Pays and Where It Strays: A Survey of the Research, 2004) provide evidence that successful hostile takeovers provide positive abnormal returns to the acquirer, either due to the replacement of inefficient management teams, or due to the value of synergies created, that enable acquirers to bid fiercely for the rights to manage the Target.

2.5. Post-Merger Integration

After an acquisition is complete, it is necessary to integrate the two companies involved, so that a new one effectively arises. Careful and successful integration will pave the way to realize the synergies idealized before the transaction and as so, it should be strategically planned and hastily executed, in order to reduce uncertainty for all stakeholders (Bruner, Applied Mergers & Acquisitions, 2004).

A vital piece of the PMI relates to what happens to the autonomy and culture of the target once it is acquired. Successful acquirers in scale-driven acquisitions often impose their culture on the target company, whereas in scope-driven deals, they either keep the target company independent, or create an entire new culture (Till Vestring, 2003).

3. Industry Analysis

3.1. The Industry and its segments

The Consumer Staples sector comprises companies that typically sell non-cyclical, essential, products such as foods, beverages, tobacco, household goods and personal care goods.

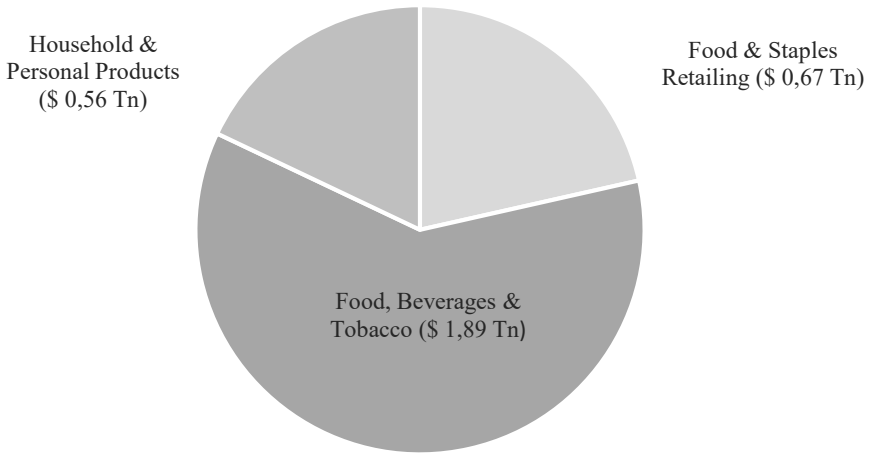

Figure 1 *– Market Capitalization of the Sub-sectors in the Consumer Staples Sector (Fidelity Investments, 2018)*

According to the GICS, it is segmented into 3 sub-sectors: Food & Staples Retailing; Food, Beverages & Tobacco; Household & Personal Products. The last two are of higher relevance to this dissertation, given that Kraft-Heinz (the Acquirer) belongs to the Food, Beverages & Tobacco sub-sector, and Kimberly-Clark (the Target) belongs to the Household & Personal Products sub-sector and so, they will be discussed in greater detail ahead.

The Food, Beverages & Tobacco sub-sector includes companies engaged in the production of packaged foods, agricultural goods, brews, wines, spirit drinks, and tobacco. The Household & Personal Care sub-sector encompasses companies that produce non-durable household products such as diapers, detergents and similar products, as well as manufacturers of beauty and personal care products.

3.2. Competitive Analysis

The Consumer Staples industry as a whole is characterized by high barriers to the entry of new competitors, in the form of strong economies of scale and high brand recognition possessed by incumbents, which positively affect the attractiveness of the industry.

On the other hand, because customers can easily change from one brand to another, the industry is also defined by fierce rivalry between established competitors.

Historically, the threat of substitutes was rather low, given the importance of the industry's products to the everyday life of the population. However, in recent times, an increased awareness of customers regarding climate change and the health benefits of consumption has started to shift demand to healthier and more ecological-friendly products.

The main customers of the industry are chain and wholesale retailers, such as supermarkets, who then sell the industry's products directly to consumers. Given the size and importance of some of those retailers to Consumer Staples companies, they possess a high bargaining power, which often translates into lower pricing and less favorable contract terms to the industry's players.

Consumer staples companies create the bulk of their products through the transformation of commodities such as wheat, coffee beans, and paper pulp. As most of the raw materials used are commodities, suppliers of the industry do not possess a high bargaining power.

3.3. Future trends

Overall, the industry is being faced with slowing growth on developed markets while emerging markets such as China and Latin America are becoming a major source of growth.

In developed economies, population growth rates are expected to be low in the foreseeable future. At the same time, consumers are becoming more and more aware of the health impacts of their consumption, shifting demand to healthier products. Young adults are also more skeptical of large, established, and mass-produced brands, and as they take over the majority of the working population, the predictability of demand for established Consumer Staples companies decreases.

In the opposite direction, emerging markets show promise of becoming a key driver of future revenues. Large populations and high economic growth, allied with increases in purchasing power and living standards, are making consumers in countries such as China more likely to buy the industry's products. However, penetrating in such markets is expected to require an

adaptation to a younger customer base, who is more adept of shopping online. That adaptation is something that traditional Consumer Staples companies might not be well-suited to do.

4. Company Analysis

4.1. The Kraft-Heinz Company

The Kraft-Heinz Company is one of the largest producers of food and beverages in the world. It was created in 2015 through the merger of Kraft Foods Group, Inc. with H.J. Heinz Company.

The H.J Heinz Company was created in 1869 and has been acquired in 2013 by Berkshire Hathaway, Inc. and 3G Capital, a private equity group.

Kraft Foods Group, Inc. was created in 2012 through the spin-off of the North American division of Kraft Foods, Inc. itself a group dating back to 1923.

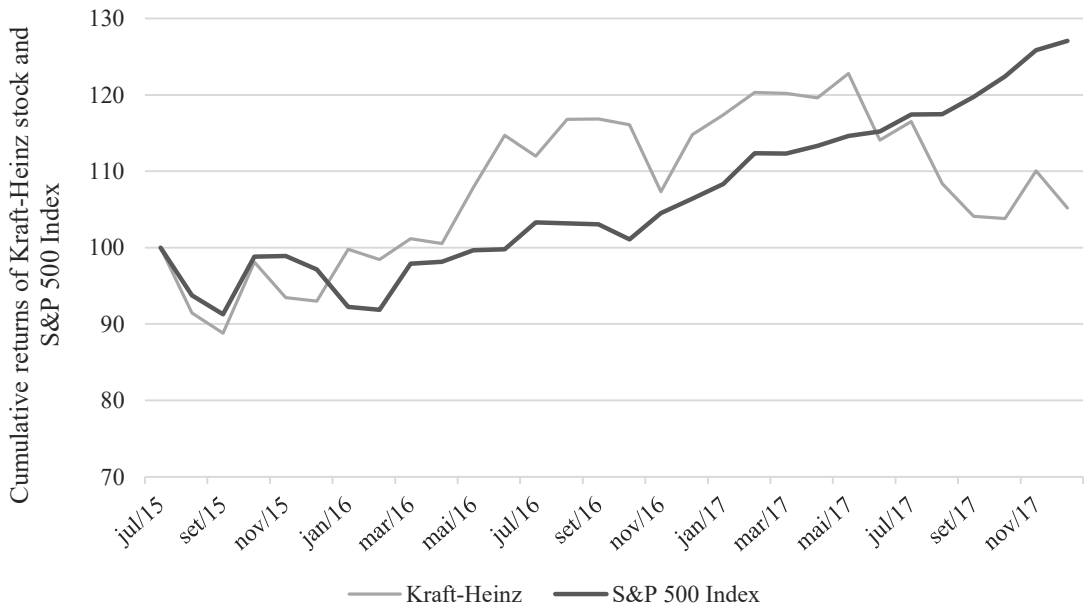

Figure 2 *– Cumulative returns of Kraft-Heinz's stock, compared to the S&P 500 Index (The Wharton School, University of Pennsylvania, 2018)*

The company manufactures food and beverage products, such as sauces, dairy, and snacks. Some of its famous brands include Kraft®, Heinz®, Philadelphia ®, and Capri-Sun®. It sells its products mainly to chain and wholesale retailers, who in turn sell them directly to customers.

To manufacture those products, the company uses a wide range of commodities, including dairy products, soybeans, and sugar. To package the goods, it also acquires large quantities of cardboard.

Kraft-Heinz segments its operations in 4 geographic areas: United States, Canada, Europe, and Rest of the World. In 2017 the United States segment accounted for 70% of Revenues while the Canada segment accounted for 8.3% of Revenues. The Europe segment represented 9.1% percent of total sales, and the remaining 12.6% were generated through the Rest of the World segment.

Kraft-Heinz is quoted in the NASDAQ stock market, has a market capitalization $70 333 Million[1], and it is the 8th largest company of the S&P 500 Consumer Staples sector, by market capitalization.

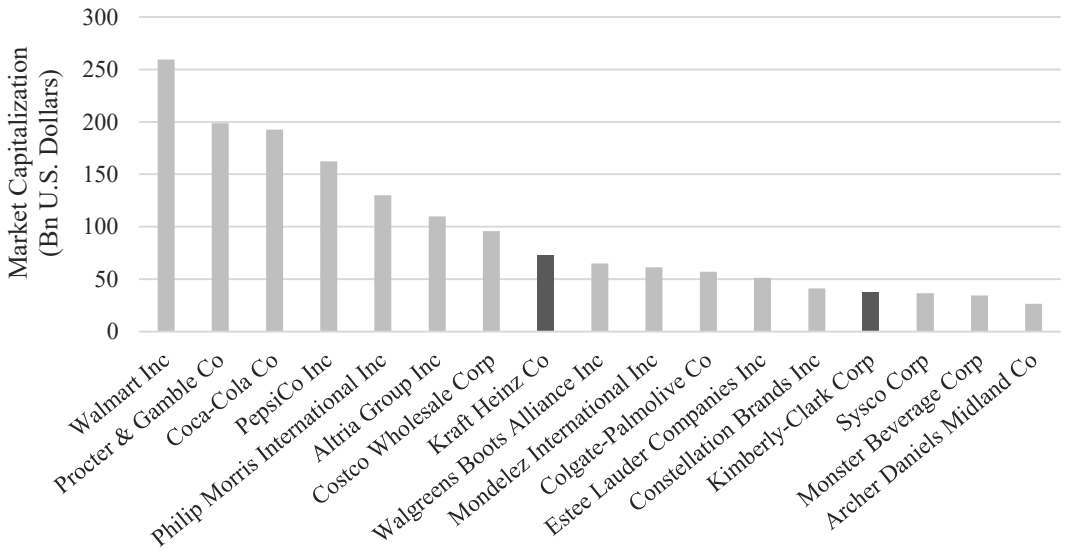

Figure 3 *– Largest companies in the Consumer Staples Sector (Thomson Reuters Eikon, 2018)*

[1] As of June, 2018.

Its Revenues grew at an average of 28.1% since 2012, year of the spin-off of Kraft Foods Group, Inc. from Kraft Foods, Inc. This number can be misleading because of the merger of 2015, which combined the Revenues of Heinz with those of Kraft.

In 2017, it obtained a Gross Margin of 58%, below the 5-year average of 61.9%. This operational improvement is reflected in the 31.7% EBITDA margin of 2017, well above the 5-year average of 21.7%, and in the 43.4% NOPLAT margin of 2017, also above the historical average of 18.4%. It is worthy of note that the NOPLAT of 2017 is vastly affected by the Tax Cuts and Jobs Act, enacted on December 22, 2017. Nevertheless, even if one considers the 2017 value as too high, the NOPLAT margin has been steadily increasing since 2013, as observable in Exhibit 11.1.

In terms of Return on Invested Capital (ROIC) and Free Cash Flow (FCF), the trend is similar, with a ROIC of 17.3% in 2017, against one of 3.7% at the end of 2013 (Exhibit 11.311.4). As for FCF, it has also been growing, from $-13 086 Million in 2013 to $10 344 Million, as seen in Exhibit 11.3. Of its components, the Gross Cash Flow has been steadily growing from $703 Million in 2013 to $12 414 Million in 2017. The Gross Investment has been more volatile and quite unpredictable over the historical period. It is worthy of note that the values of 2013 and 2015 are largely affected by the spin-off of 2012 and the merger of 2015, which lead to high investments in Tangible and Intangible assets.

In summary, the values of 2017 reflect operating improvements over the recent past of the company, which highlight the management efficacy in strengthening profit margins.

The financial health of the company has also been steadily improving and building up to a capital structure favoring more equity than in the recent past. The interest coverage ratio has increased from an EBITDA 1.1 times above interest expenses in 2013 to 6.8 times interest expenses in 2017, translating into a higher capacity to meet interest expenses. At the same time, the D/E ratio decreased from 0.76 in 2013 to 0.41 in 2017, evidencing a more robust company.

4.2. Kimberly-Clark Corporation

Kimberly-Clark Corporation is one of the world's largest manufacturers of personal care and consumer tissues products. It was established in 1872 and incorporated in Delaware in 1928.

The company manufactures personal care and consumer tissue products through its Personal Care, Consumer Tissue, and K-C Professional operating segments. Well-known brands belonging to the company include Huggies ®, Kleenex®, Scottex ®, and Cottonelle®.
It sells its household products to supermarkets and other retailers, including e-commerce, who in turn sell them directly to consumers. Its away-from-home products are sold through distributors directly to customers. To manufacture those products, Kimberly-Clark relies on a number of raw materials, including cellulose fiber, which is used for tissue products, and polypropylene, used for disposable diapers and away-from-home products.
The company segments its operations geographically into 2 segments: North America and Outside North America. In 2017, the North America segment amounted to 51% of sales, while the remaining 49% were generated Outside North America.

Kimberly-Clark is quoted in the New York Stock Exchange, has a market capitalization of $35 435 Million[2] and it is the 14th largest company of the S&P 500 Consumer Staples sector, by market capitalization.

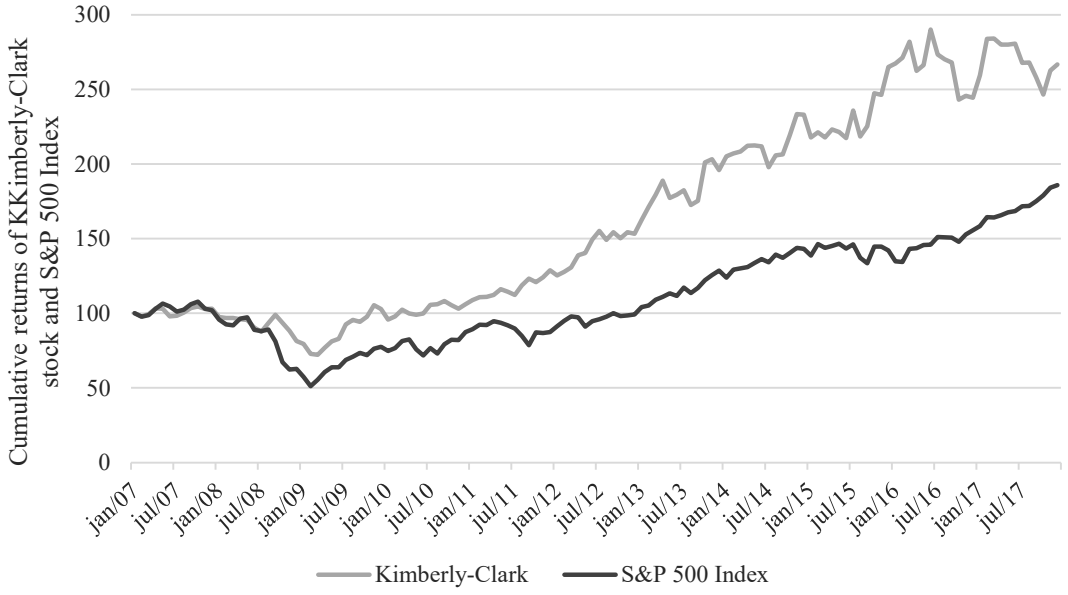

Figure 4 *– Cumulative returns of Kimberly-Clark's stock, compared to the S&P 500 Index (The Wharton School, University of Pennsylvania, 2018)*

[2] As of May, 2018.

The company's Revenues have been decreasing along the historical period, at an average rate of -0.8% per year. The Consumer Tissue segment was the main contributor to this general decline, as it shrank in size at an average of -1.4% per year. Nevertheless, the K-C Professional and the Personal Care business segments have grown since 2008, at average yearly growth rates of 0.2% and 1.1%, respectively, and helped to mitigate the bad performance of the Consumer Tissue segment.

Kimberly-Clark's Gross Margin has been improving for the last 10 years, with COGS representing 60.1% of Revenues in 2017 (Exhibit 11.5) against a value of 65.8% in 2008. Both the EBITDA and NOPLAT margins followed the same trend, with EBITDA margin growing from 17.1% in 2008 to 22.0% in 2017, and NOPLAT margin increasing from 9.2% in 2008 to 13.2% in 2017.

Following the above-mentioned operational improvements, it is natural that Return on Invested Capital walked a similar path. The company displayed a ROIC of 16.8% in 2008, which it managed to improve almost twofold to 31.2% in 2017. Despite the positive trends of the performance measures mentioned before, FCF showed a more erratic path. It had ups and downs across the historical period, dipping below $1 000 Million in some years, and going above $3 000 Million in others. Overall, the average of the period was around $2 000 Million. (Exhibit11.8)

In terms of financial health and capital structure, Kimberly-Clark has become more leveraged in recent years, with the Debt to Equity ratio rising to 6.54 in 2017, from 2.28 in 2008. Despite the higher leverage, the company's interest coverage ratio slightly improved, from an EBITDA 10.4 times larger than interest expenses in 2008, to a value of 12.7 times the interest expenses of 2017 (Exhibit 11.8).

5. Valuation of each individual company

Before delving into the combination of the two companies, it is necessary to have a clear understanding of their stand-alone value. It is, therefore, required to evaluate each one of them, based on their expected performance.

To this end, each company had its modified[3] Income Statement, Balance-Sheet, and Statement of Cash Flows, from now on named Statement of NOPLAT, Statement of Invested Capital, and Statement of Free Cash Flow, projected for the next 15 years. This period is referred to as the explicit/forecast period. At the end of the explicit period, and to avoid the accumulation of forecasting errors that a line-by-line forecasting would inevitably lead to, the performance of each company is assumed to grow as a growing perpetuity.

5.1. Kraft-Heinz

5.1.1. Kraft-Heinz Forecast assumptions

The company's Revenues were used as the key driver of the great majority of items. As so, a thoughtful forecast is vital to a proper valuation. To forecast Kraft-Heinz Revenues across the explicit period, two steps were taken. First, total Revenues for the years of 2018 to 2022 were computed[4]. From 2023 onward, the Revenues were assumed to grow at 1.4%, the average growth rate from 2017 to 2022.

Most of the operational items in the NOPLAT statement (Exhibit 11.10) were forecasted using either the last historical ratio of item-to-revenues, or an average of that same ratio (Exhibit 11.9). The choice between one and the other was made based on the perceived stability of the ratio. When the ratio was perceived as instable, an average was used, otherwise the last historical value for the ratio was chosen as the forecast driver.

COGS were forecasted at 58.0% of Revenues and SG&A at 11.2% of Revenues.

Depreciation and Amortization are an exception to this rule, and so are the Operating Cash Taxes. Depreciation for Kraft-Heinz was forecasted using the ratio between Depreciation of 2017 and NPPE of 2016 (13.3%). Amortization was forecasted using the company's own Amortization plan until 2022, and assumed constant at 2022 values from 2023 onward.

[3] Modified to separate Operating and Non-operating items, thus allowing the study of the firm's operating activity.
[4] Based on analyst mean projections from (Thomson Reuters Eikon, 2018).

Operating Cash Taxes, which reflect how much of EBIT must a company pay in taxes, were forecasted using the historical average of the ratio between Operating Cash taxes and EBIT (22.7%).

Interest Expenses and Income, Non-Operating Income, and Non-Operating Taxes, despite being non-operational, were also forecasted, to reconcile NOPLAT with Net Income. Interest expenses were computed as a percentage of previous year's Interest-bearing Liabilities, using the value of 2017 (3.7%) as driver. Interest Income was forecasted based on the historical relationship between Interest Income and Excess Cash (1.3%). Non-Operating Income was assumed to grow in line with Revenues, based on the historical average of 2.1%.

As with the NOPLAT statement, the Statement of Invested Capital was forecasted using Revenues as the main driver. (Exhibit 11.11)

Working Capital items were forecasted this way, with the exceptions being Inventories and Accounts Payable, which were assumed to grow in line with COGS, at 18.5% and 26.5% of COGS, respectively. Accounts Receivable (3.5%), Working Cash (2.0%), Other Current Assets (3.7%), Income Taxes Receivable (0.7%), Other Current Liabilities (4.5%), Accrued Expenses (2.6%), and Income Taxes Payable (2.4%) were all assumed to grow with Revenues.

NPPE were also assumed to grow based on their historical relationship with Revenues, as this relationship tends to be stable.[5] It averaged for 30.5% of Revenues in the Historical Period, value that was used to forecast them.

Net Intangible Assets were projected in the same way, using the 5-year historical average (228.4%) as a basis for the projections. Goodwill, on the other hand, was assumed constant at the 2017 value of $44 824 Million.

Equity items are an exception to the commonly used rule. Common Stock was assumed constant at the 2017 value of -212. Dividends were assumed to be paid at the 5-year average Payout Ratio. Paid-in Capital, much like common stock, was assumed constant at 2017's value of $58 711 Million. Operating Deferred Taxes were projected using the historical relationship between Operating Deferred Taxes and Operational Cash Taxes (265.4 % of Operational Cash Taxes).

[5] (Koller, Goedhart, & Wessels, 2015)

Debt items, for the most part, were assumed to grow in line with Revenues, based on historical averages. Short-term Debt was forecasted at 13.8% of Revenues along the explicit period, Long-term Debt at 108%. Pension Liabilities follow the same assumption. NCIs were projected as a percentage of EBITDA, again using historical averages.

For the projections of the Statement of Free Cash Flow (Exhibit 11.12), no assumptions were necessary, as it was created as a byproduct of developments in items belonging to the other statements. FCF was forecasted as the difference between Gross Cash Flow, generated by NOPLAT plus Depreciation and Amortization, and Gross Investment, generated by the investments in Working Capital, Capex, Intangible Assets, and Other Non-Current Operating Assets. FCF after Goodwill was forecasted as FCF before Goodwill minus the investment in Goodwill.

In order to compare the projections made with the historical performance of Kraft-Heinz, an analysis of key items was made (Exhibits 11.4 and 11.13). Kraft-Heinz's Revenues managed to grow at an average rate of 28.1% per year during the historical period, compared to 1.5% per year during the explicit forecast period. It is worthy to note that the value of 28.1% is heavily influenced by the merger of Heinz and Kraft in 2015. In terms of operating efficiency, the company obtained average EBITDA and NOPLAT margins of 21.7% and 18.4% from 2013 to 2017, which compare to averages of 30.9% and 20.1%, respectively, between 2018 and 2032. ROIC without Goodwill averaged to 7.7% per year from 2018 to 2032, compared to the historical average of 8.1%.

The projections made led to a FCF of $3 452 Million in 2018, which then grows at a steady pace, reaching $5 444 Million in 2032, a value below that of 2017 ($10 344 Million). Nevertheless, the value of 2017 is influenced by the Tax Cuts and Jobs Act.

In terms of Capital Structure, the forecasts made led to a fairly stable Debt-to-Equity ratio, consistently around 0.30 to 0.40 across the forecast period, which compares to a historical average of 0.53. The Interest Coverage Ratio also remained fairly stable, with EBITDA being consistently 6.8 times greater than interest expenses, a value above the average of 4.3 from 2013 to 2017.

5.1.2. Kraft-Heinz Valuation and Cost of Capital

To obtain the stand-alone value of the company, three methods were deployed. The first being the DCF/WACC, then DCF/APV, and finally the method of Comparables.

5.1.2.1. Kraft-Heinz DCF/WACC Valuation

WACC

Kraft-Heinz's WACC was estimated to be 4.8% (Exhibit 11.14), using the formula:

$$WACC = \frac{D}{V}k_d(1 - T_m) + \frac{E}{V}k_e$$

Kraft-Heinz's Levered Cost of Equity, k_e,of 5.7%, was estimated using the Capital Asset Pricing Model formula, presented below, where r_f is the risk-free rate, the market risk premium $[E(R_m) - r_f]$ measures the excess returns of investing in the stock market instead of in riskless bonds, and β_e measures the sensitivity of Kraft-Heinz stock price to fluctuations in the market as a whole.

$$E(R_i) = r_f + \beta_i[E(R_m) - r_f]$$

The r_f of 2.98% was computed based on the yield of zero-coupon bonds, issued by the U.S. Treasury, and maturing in 10 years[6]. The Market Risk Premium of 6.1%, was computed taking into account both the Geometric and Arithmetic means[7] of the U.S. stock market returns[8] over the return of U.S Treasury´s 10-year bonds, measured monthly from May, 1941 to December, 2017

The β_e of 0.45 was estimated combining the CAPM with a Bottom-up Beta approach based on the peer companies Mondelez International Inc. and McCormick & Company. To obtain the group of comparable companies, first, a set of companies was chosen[9]. Secondly, the most appropriate peers (Mondelez International Inc. and McCormick & Company) were selected,

[6] (Thomson Reuters Eikon, 2018)

[7] Formula for Geometric Mean: $G = \sqrt[n]{x_1 x_2 \dots x_n}$); formula for Arithmetic Mean: $A = \frac{1}{n} * \sum_{i=1}^{n} x_i$

[8] Obtained from (The Wharton School, University of Pennsylvania, 2018).

[9] Based on (Thomson Reuters Eikon, 2018) and (Morningstar Financials, 2018).

using k-means cluster analysis. Cluster analysis was the selection method chosen because it relies purely on quantifiable data, thus avoiding most judgement biases of other methods.

Then, for each company in the peer group, a regression of the CAPM was run[10], to obtain their respective β_e, which was subsequently smoothed using the formula:

$$Smoothed\ \beta_e = 0.33 + 0.67\ (Raw\ \beta_e)$$

Next, the median[11] Unlevered Beta (β_u) of the firm, 0.32, was estimated by applying the formula:

$$\beta_u = \frac{Smoothed\ \beta_{e_{(peers)}}}{\left[1 + (1-t) * \frac{D}{E}_{(peers)}\right]}$$

Then, the firm's D/E, computed based on the Market Values of Equity and Debt, and Marginal Tax Rate (T_m), computed as the sum of U.S. federal, state and local income tax rates, were applied to its β_u, using the formula below, and giving rise to Kraft-Heinz's β_e of 0.45.

$$\beta_e = \beta_u * \left[1 + (1 - T_m) * \frac{D}{E}\right]$$

Kraft-Heinz's after-tax Cost of Debt, $k_d(1 - T_m)$, of 3.3% was computed combining its Cost of Debt of 5.2% with the Marginal Tax Rate of 36.1%. The Cost of Debt was calculated as the weighted average of the yields on Kraft-Heinz's long-term bonds[12]. Only long-term bonds were used for two reasons. First, so that the Cost of Debt and the Cost of Equity are consistently reflecting the long-term cost of capital and secondly, because the WACC will also be used ahead to compute the Continuing Value of the company in perpetuity.

The weights of Equity and Debt in the company's Capital Structure were computed using the market values of Equity and Debt, leading to weights of 60% and 40%, respectively. To obtain the market value of Equity of $70 333 Million a simple calculation of share price times the

[10] Stock prices obtained from (The Wharton School, University of Pennsylvania, 2018); Stock market returns obtained from (The Wharton School, University of Pennsylvania, 2018).
[11] In small samples, the effect of outliers over the average is magnified. For this reason, the median value was used.
[12] (Thomson Reuters Eikon, 2018)

number of shares outstanding was done[13]. To obtain the market value of debt ($46 844 Million), the value of all Debt and Debt Equivalent[14] claims on the firm was computed.

DCF/WACC Valuation

Then, the firm's forecasted FCFF was discounted to the present using the WACC, to arrive at its Value from Operations. As described before, Kraft-Heinz's performance was forecasted line-by-line only up until 2032. From then on, being the firm's key valuation drivers growing at a steady-state, its Continuing Value (from 2032 onwards) was estimated as a growing perpetuity, using the following formula:

$$Continuing\ Value_t = \frac{NOPLAT_{t-1} * (1 - \frac{g}{RONIC})}{(WACC - g)}$$

The value of all Non-Operating Assets was then added to the Value from Operations, thus arriving at an Enterprise Value of $111 402 Million. Then, the value of all Debt and Debt Equivalent claims on the firm were subtracted, to arrive at an Equity value of $64 558 Million. Subsequently, that value was divided by the number of shares outstanding, to arrive at a share price of $52.9. (Exhibit 11.15)

5.1.2.2. Kraft-Heinz DCF/APV Valuation

APV inputs

As described in the Literature Review, the APV approach requires different inputs than its WACC counterpart (Exhibit 11.14). The firm's Unlevered Cost of Equity (k_u) of 4.9% was estimated similarly to its Levered counter-part, by applying the CAPM, but using the β_u of 0.32, instead of β_e. Kraft-Heinz's β_u was computed before, using the formula:

$$\beta_u = \frac{\beta_{e_{(peers)}}}{\left[1 + (1 - t) * \frac{D}{E}_{(peers)}\right]}$$

[13] Based on values as of June, 2018.
[14] Bonds Outstanding ($31986 Million) (Thomson Reuters Eikon, 2018), Bank Debt ($14100 Million) (Thomson Reuters Eikon, 2018), Unfunded Pension Liabilities ($758 Million) (Kraft-Heinz, 2018).

The Interest Tax Shields were computed by multiplying each year's Interest Expenses by the firm's Marginal Tax Rate of 36.1%. The rate used to discount the Interest Tax Shields was assumed to be 5.2%, the company's Cost of Debt.

The firm's Probability of Default was considered to be 7.54 % based on its credit rating of BBB[15] and the table presented in Exhibit 11.41. The amount of value lost due to financial distress was assumed at 30% of the Value of Operations (Value of the firm if all Equity-financed), based on the type of industry it belongs to[16].

DCF/APV Valuation

The firm's Value of Operations was computed similarly to the DCF/WACC approach. The main difference resides on the discount rate used. Instead of applying the WACC, the Unlevered Cost of Equity (k_u) was used instead. The same applies for the formula used to compute Continuing Value:

$$Continuing\ Value_t = \frac{NOPLAT_{t-1} * (1 - \frac{g}{RONIC})}{(k_u - g)}$$

To obtain the value of financing effects, several steps were taken. First, the NPV of ITS was computed using the firm's Cost of Debt as discount rate. The Continuing Value for the ITS was computed using a standard growing perpetuity formula:

$$Continuing\ Value_t\ ITS = \frac{ITS_{t-1}}{(discount\ rate - g)}$$

Secondly, the negative side effects of leverage, the Expected Costs of Financial Distress, were computed. Assuming that in the presence of financial distress, the company would lose 30% of its Value from Operations, and with a probability of financial distress of 7.54%, the Expected Costs of Financial Distress were estimated to be $2 391 Million.

By adding together the Value from Operations with the PV of the ITS and the Expected Costs of Financial Distress, an Enterprise Value of $115 919 Million was obtained (Exhibit 11.2711.16).

[15] (Thomson Reuters Eikon, 2018)
[16] (Passov, 2003)

By repeating the procedure used before to move from Enterprise Value to Price per Share, the share price of Kraft-Heinz using the APV method was estimated at $56.6.

5.1.2.3. Kraft-Heinz Comparables Valuation

In order to stress-test the valuation techniques used before, a third method was used, the method of Comparables.

To evaluate Kraft-Heinz using comparable firms, several steps were taken (Exhibit 11.17). First, the comparable firms were chosen based on the results of the Cluster Analysis used to determine the peer group. The firms selected were Mondelez International Inc. and McCormick & Company. Then, forward-looking EV-to-EBITDA multiples were computed, using the projected 2018 EBITDA of each company and its correspondent EV[17]. Next, a median value of the ratio (15.1) was computed and applied to Kraft-Heinz's forecasted EBITDA of 2018, to arrive at an EV of $122 659 Million. By repeating the procedure used to move from EV to Price per Share, the share price of Kraft-Heinz using the Comparables method was estimated to be $62.1.

5.1.3. Kraft-Heinz Sensitivity and Scenario Analysis

The valuation techniques applied to evaluate the company rely on inputs and assumptions that are subject to uncertainty, and changes in those inputs can potentially affect the outcome of the valuation. To develop a sense of which inputs have the largest impact on the company's valuation, a sensitivity analysis to several key drivers was made. Then, since in the real world *ceteris paribus* variations are quite rare, a scenario analysis was built, where the variables with greater impact on the valuation were assumed to change together.

Sensitivity Analysis

To understand the impact of certain variables[18] on the valuation outcome, a sensitivity analysis was built. To each variable, three possible values were computed. First, its normal value, as

[17] (Thomson Reuters Eikon, 2018)

[18] The three first variables were chosen because they are the main inputs of the Continuing Value, which represents the largest fraction of Value from Operations, while the other three were chosen because of their operational importance.

used in the valuation. Then, pessimistic and optimistic ones (-10/+10% or +10/-10%, depending on the type of variable). Finally, the Enterprise Value of the company was computed using the WACC/DCF method, with every variable apart from the selected one staying unchanged. The results are summarized in Exhibit 11.18.

From the sensitivity analysis, it is observable that WACC and COGS as a percentage of Revenues (used to forecast COGS) have the most impact on the valuation out of the selected variables. If WACC's true value lies 10% above or below its estimated value of 4.8%, the impact on the valuation of Kraft-Heinz would range from -12.0% to 15.9%. However, COGS as a percentage of Revenues emerge as the most impactful variable selected. An error of 10% when estimating it would potentially impact the EV of the firm in 30%. The other variables used seem to have far lower effects on the outcome, with changes of 10% increasing or decreasing EV around 1%.

Scenario Analysis

Since variables often change together, and based on the results of the sensitivity analysis, two scenarios were built (Exhibit 11.19).

The first, an optimistic one, assumed that the global economy continues the positive trend of the last few years, which then translate into an increase of 0.5 pp. in the revenue growth rate of Kraft-Heinz across the forecast period. At the same time, the company was assumed to be able to increase its operating profitability, with COGS as a percentage of Revenues dropping 1 pp. (to 57% of Revenues) across the period. On top of that, the climate of low interest rates and risk make WACC drop 0.2 percentage points, to 4.6%. In this scenario, the company would see its EV increase 15.4%, to $128 515 Million, which would boost its stock price 26.5%%, to $66.9.

The pessimistic scenario was built on the idea of a global economy slowdown. The decrease in growth rates (-0.5 pp.) force competitors to cut prices, which then put pressure on Kraft-Heinz operating margins (+1 pp.) and profitability. At the same time, risk levels increase, and the firm's WACC deteriorates (+0.2 pp.) as a result. In this scenario, the firm would lose 11.8% of its Enterprise Value, which would make its stock price drop 20.4%, to $42.1.

5.2. Kimberly-Clark

5.2.1. Kimberly-Clark Forecast assumptions

As mentioned for Kraft-Heinz, the company's Revenues were used as the key driver of the great majority of items.

To forecast Kimberly-Clark's Revenues across the explicit period, a similar method was used. First, Revenues by Segment line for the years of 2018 to 2022 were computed[19]. Secondly, in 2023, the 5-year average growth rate of each segment was calculated, to forecast 2023's Revenues by Segment. Then, the Revenues of each segment were added to arrive at 2023's Total Revenues of $21 677 Million. From 2023 onwards, projections were no longer made by segment, and Total Revenues were assumed to grow at 2.6%, the revenue growth rate of 2023.

Most of the operational items in the NOPLAT statement (Exhibit 11.21) were again forecasted using either the last historical ratio of item-to-revenues, or an average of that same ratio (Exhibit11.20). When the ratio was perceived as instable, an average was used, otherwise the last historical value for the ratio was chosen as the forecast driver.

COGS were forecasted at 61.7% of Revenues, whereas SG&A and Other Operating Expenses were forecasted at 18.5% and 1.6% of Revenues, respectively. Depreciation was projected using the historical ratio between Depreciation and NPPE of the previous year (10.8%). Kimberly-Clark had no Intangible Assets left to amortize since 2012, and there were no known intentions of acquiring more. As so, Amortization was assumed to be 0 for the rest of the company's life. Operating Cash Taxes, which reflect how much of EBIT must a company pay in taxes, were forecasted using the historical average of the ratio between Operating Cash taxes and EBIT (33.0%).

Interest Expenses were computed as a percentage of previous year's Interest-bearing Liabilities, using the historical average of the ratio (4.2%) as driver. Interest Income was forecasted based on the historical relationship between Interest Income and Excess Cash (3.8%). Non-Operating Income was assumed to be 0 for all years of the explicit period, following a trend that started in 2012.

[19] Based on analyst mean projections from (Thomson Reuters Eikon, 2018).

Similarly to the approach used for the Acquirer, the Statement of Invested Capital was forecasted using Revenues as the main driver (Exhibit 11.22).

Working Capital items were forecasted this way, with the exceptions being Inventories, Accounts Payable, and Other Current Liabilities (because they are composed mainly by the item Other Payables), which were assumed to grow in line with COGS, at 17.3%, 19.8%, and 5.9% of COGS, respectively. Accounts Receivable (12.5%), Working Cash (2.0%), Other Current Assets (2.5%), and Accrued Expenses (6.4%) were all forecasted based on their respective relationship with Revenues.

NPPE, similarly to what was done for Kraft-Heinz, was assumed to grow based on its historical relationship with Revenues (39.1%)

As Kimberly-Clark had Intangible Assets with a carrying amount of $0 in 2017 and there were no known intentions of acquiring more, Intangible Assets were forecasted to be $0 for the rest of the company's life.

Equity items were also forecasted similarly to what was done with Kraft-Heinz. Common Stock was assumed constant at the 2017 value of $473 Million. Dividends were assumed to be paid at the 5-year average Payout Ratio of Dividends to Net Income. Operating Deferred Taxes were projected using the historical relationship between Operating Deferred Taxes and Operational Cash Taxes (79.4% of Operational Cash Taxes).

Debt items, for the most part, were assumed to grow in line with Revenues, based on historical averages. Short-term Debt was forecasted at 5.6% of Revenues across the explicit period, while Long-term Debt was projected at 31.0%. Pension Liabilities follow the same idea and were forecasted at 7.7% of Revenues. NCIs were projected as a percentage of EBITDA, using the historical average of 7.7%.

For the projections of the Statement of Free Cash Flow (Exhibit 11.23), again no assumptions were necessary, since it was created as a byproduct of developments in items belonging to the other statements. FCF before and after Goodwill were computed in the same way as with the Acquirer.

In order to compare the projections made with the historical performance of Kimberly-Clark, an analysis of key items was made (Exhibits 11.8 and 11.24). The firm's Revenues decreased at an average rate of -0.8% per year during the historical period, whereas they grow at an

average of 2.8% per year during the explicit forecast period. In terms of operating efficiency, the company obtained EBITDA and NOPLAT margins of 18.1% and 9.2% across the historical period, which compare to averages of 18.1% and 9.4%, respectively, between 2018 and 2032.

ROIC averaged to 20.8% per year from 2018 to 2032, compared to the value of 19.7% from 2008 to 2017.

The projections made led to a FCF in 2018 of $1 328 Million, which then grows steadily until reaching $2 250 Million in 2032.

In terms of Capital Structure, the forecasts made led to a substantial decrease in the Debt-to-Equity ratio, when compared to historical average. The ratio averaged to 4.38 from 2008 to 2017, and 1.44 between 2018 and 2032. It is worthy to note that the values for the ratio in 2016 and 2017 were massively affected by accounting items that largely diminished the Equity, thus making the ratio skyrocket. The Interest Coverage Ratio remained fairly stable across the forecast period, with EBITDA being consistently 12 times greater than interest expenses, similar to the historical average (11.93).

5.2.2. Kimberly-Clark Valuation and Cost of Capital

To obtain the stand-alone value of Kimberly-Clark, the same three methods were used (DCF/WACC, DCF/APV, and Comparables).

The methods used to estimate each input for the WACC and APV were exactly the same as with Kraft-Heinz and so will not be discussed in detail again. Instead, just the values for Kimberly-Clark will be presented, with remarks made whenever appropriate.

5.2.2.1. Kimberly-Clark DCF/WACC Valuation

WACC

Kimberly-Clark's WACC (Exhibit 11.25), was estimated to be 5.3%.

Its Levered Cost of Equity, k_e, was estimated to be 6.1%, using the same r_f and Market Risk Premium as before, and a Levered Equity Beta (β_e) of 0.51, in turn estimated combining the

CAPM with a Bottom-up Beta approach based on the peer firms Colgate-Palmolive Company, Unilever NV, The Clorox Company, and Edgewell Personal Care.

The after-tax Cost of Debt, $k_d(1 - T_m)$, of 2.7% was computed combining its Cost of Debt of 4.2% with a Marginal Tax Rate of 36.1%.

The weights of Equity and Debt in the company's Capital Structure, were computed using the market values of Equity and Debt, leading to values of 78% and 22%, respectively.

DCF/WACC Valuation

Then, the firm's forecasted FCF was discounted to the present using its WACC, to arrive at the Value from Operations. From 2032 onwards, its Value from Operations was computed as a growing perpetuity, using the formula:

$$Continuing\ Value_t = \frac{NOPLAT_{t-1} * (1 - \frac{g}{RONIC})}{(WACC - g)}$$

The value of all Non-Operating Assets was then added to the Value from Operations, thus arriving at an Enterprise Value of $50 975 Million. Then, the Market Value (or proxy if no Market Value available) of all Debt and Debt Equivalent claims on the firm[20] was subtracted, to arrive at an Equity value of $41 006 Million. That value was then divided by the number of shares outstanding[21], to arrive at a share price of $119.4 (Exhibit 11.2711.26)

[20] Bonds Outstanding ($6804 Million) (Thomson Reuters Eikon, 2018), Bank Debt ($2000 Million) (Thomson Reuters Eikon, 2018), Unfunded Pension Liabilities ($1164Million) (Kimberly Clark Corporation, 2018)
[21] As of May, 2018.

5.2.2.2. Kimberly-Clark DCF/APV Valuation

APV inputs

The firm's Unlevered Cost of Equity (k_u) of 5.6% (Exhibit 11.25) was estimated similarly to that of Kraft-Heinz, but using an Unlevered Equity Beta (β_u) of 0.43.

A Marginal Tax Rate of 36.1% was used to compute the ITS. The rate used to discount the ITS was assumed to be 4.2%, the company's Cost of Debt. The firm's Probability of Default was considered to be 0.66% based on its credit rating of A[22] and the table presented in Exhibit 11.41. The amount of value loss due to financial distress was assumed at 30% of the Value of Operations[23].

DCF/APV Valuation

The firm's Value of Operations was computed similarly to the DCF/WACC approach, by discounting the FCF at the Unlevered Cost of Equity (k_u) .To obtain the Continuing Value, the same formula as in DCF/WACC was used, but using k_u instead of WACC.

To obtain the value of financing effects, the same steps used when valuing the Acquirer were taken. First, the NPV of the ITS was computed, using the firm's Cost of Debt as discount rate. The Continuing Value for the ITS was computed using the formula:

$$Continuing\ Value_t\ ITS = \frac{ITS_{t-1}}{discount\ rate - g}$$

Secondly, the negative side effects of leverage, the Expected Costs of Financial Distress, were estimated. Assuming that in the presence of financial distress, the company would lose 30% of its Value from Operations, and with a probability of financial distress of 0.66%, the Expected Costs of Financial Distress were estimated to be $91 Million.

By adding together the Value from Operations with the PV of the ITS and the Expected Costs of Financial Distress, an Enterprise Value of $52 593 Million was obtained.

[22] (Thomson Reuters Eikon, 2018)
[23] (Passov, 2003)

By repeating the procedure used before, the share price of Kimberly-Clark using the APV method was estimated to be $124.2 (Exhibit11.27).

5.2.2.3. Kimberly-Clark Comparables Valuation

In order to stress-test the valuation, and following what was done for Kraft-Heinz, a third method was used, the method of Comparables (Exhibit 11.28).

Kimberly-Clark's comparable firms were chosen based on the results of the Cluster Analysis used to determine the peer group. The firms selected were Colgate-Palmolive Company, Unilever NV, The Clorox Company, and Edgewell Personal Care. Then, similar to what was done before, forward-looking EV-to-EBITDA multiples were computed, using the projected 2018 EBITDA of each company and the correspondent Enterprise Values[24]. Next, a median value of the ratio (13.4) was computed and applied to Kimberly-Clark's forecasted EBITDA of 2018, to arrive at an Enterprise Value of $44 920 Million. By repeating the procedure used before, the share price of Kimberly-Clark using this method was estimated to be $101.8.

5.2.3. Kimberly-Clark Sensitivity and Scenario Analysis

Sensitivity Analysis

In line with what was done for Kraft-Heinz, a sensitivity analysis was built, using the same approach and selected variables. The results, presented on Exhibit 11.29, show that, much like Kraft-Heinz, WACC and COGS as a percentage of Revenues are the variables that have a higher impact on the outcome of the valuation. A WACC 10% higher than estimated would make the Enterprise Value of Kimberly-Clark drop 16.0%, whereas a value 10% lower would make the EV increase as much as 23.9%. Similar to Kraft-Heinz, COGS as a percentage of Revenues have the greatest impact on the valuation, out of the variables selected. Estimating it 10% higher or lower could decrease or increase the value of the company around 53%.

Again, the other variables seem to have a much lower effect on the valuation.

[24] (Thomson Reuters Eikon, 2018)

Scenario Analysis

Similarly to what was done for the acquirer, a scenario analysis was built afterwards, based on the same scenarios (Exhibit 11.30).

In the optimistic case where the global economy continues its positive trend, margins improve, and the WACC decreases, Kimberly-Clark's EV would increase 28.2%, to $65 340 Million, which in turn would boost its stock price 35%, to $161.3. In the opposite direction, the pessimistic scenario would make the company lose 23.0% of its value, leading to a drop of 28.6% on the price of its shares, to $85.3.

5.3. Valuation Results

The results obtained with the three different methods, for both companies, are presented below, with the choice between one method and the other coming into play later in this dissertation, when computing the value obtained from the deal's synergies, and will be addressed at that point.

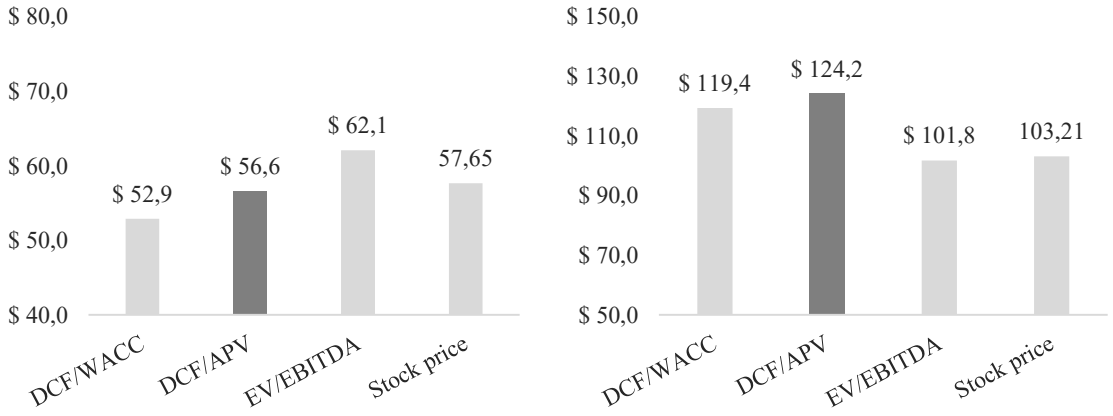

Figure 5 *– Kraft-Heinz's and Kimberly Clark's Valuation results*

6. Deal Rationale

In the early spring of 2017, Kraft-Heinz announced it had made a bid to acquire Unilever, in a move to further consolidate the Consumer Staples industry. The move failed, but signaled the markets that the company was ready to start acquiring again, now that the integration between Heinz and Kraft was complete. After all, the *modus operandi* of 3G Capital, the largest shareholder of the company and from which the CEO, Bernardo Hees, comes from, has always been that. Acquiring a company in the sector, improving its operational efficiency, generating cash, and repeating the process with a new acquisition. Furthermore, the entire industry is trying different ways to cope with stagnant growth on its traditional markets, and acquisitions are naturally one of the possible actions to take.

Quickly, suggestions of other possible targets flourished in the press. This dissertation picked up on that assumption that Kraft-Heinz was indeed looking for a new target to acquire, and built upon it.

A strategic analysis followed, to understand Kraft-Heinz's strengths and weaknesses and to find the potential best fit for an acquisition. Kraft-Heinz is notoriously famous in the sector for its capacity to improve operational efficiency, with profitability ratios that seemed impossible in the industry before 3G Capital acquired Heinz in 2012. However, for all that profitability, it lacks growth potential, with a discrete presence in emerging markets.

To select the most suitable target, a preference for companies with improvable operating margins and strong presence in emerging markets was thus given. Several companies fitted these characteristics, but were considered not acquirable for various reasons. For instance, Danone is perceived as a French national champion, and the likelihood of a successful acquisition was considered to be low. Others companies, such as the Campbell Soup Company, have ownership structures concentrated in few powerful shareholders, which are historically linked to the company and would make an acquisition either too costly, or downright impossible.

From this analysis a firm emerged, Kimberly-Clark Corporation. With stable and renowned brands, such as Scottex®, low operating margins ready to be improved, and a strong and growing focus on international markets, the target was defined.

7. Synergies

Synergies are, for the most part, the core reason behind M&A. Keeping true to this rule, they play a vital role in this transaction, being the key driver for the price to pay to acquire the Target, and will be addressed ahead.

First, a brief look at the combined company without any synergy effects is taken. Secondly, the methods to estimate the synergies for this particular deal are presented. Then, to have an idea of how synergies affect the combined company's performance, an analysis of key performance drivers of the combined company with and without synergies follows. Lastly, the value of said synergies is estimated, to determine how much to pay for the acquisition.

7.1. Combined company without synergies

Before proceeding with the explanation and valuation of the synergies created by the deal and looking at the company that will arise from it, a brief look at the firm that would be created if the two companies were simply added together, is taken. This will be particularly helpful later on, to understand how the deal and the synergies created by it affect the performance of the company and create value for shareholders.

To have an idea of the performance of that would-be company, the three modified financial statements (Statement of NOPLAT, Statement of Invested Capital, and Statement of Free Cash Flow) of Kraft-Heinz and Kimberly-Clark were simply added together, line by line. This would-be company, in 2018, would have Total Revenues of $44 804 Million, a NOPLAT of $7 043 Million, an Invested Capital considering Goodwill of $123 141 Million, and would generate $4 780 Million in Free Cash Flow.

7.2. Estimation of Synergies

To provide a clearer analysis of each expected synergy, they will be first separated into Revenue and Cost Synergies, and analyzed based on their separate effects on each of the companies involved in the transaction.

7.2.1. Revenue synergies

Synergies arising from revenue enhancements are both hard to estimate and have the potential to tremendously inflate the value of the deal. On top of that, the sector in which both companies are inserted is one facing slow revenue growth. Given those characteristics and the fact that managers are prone to be overconfident on their capacity to actually generate said synergies[25], revenue enhancements for this deal were estimated with modesty.

It was assumed that the combined company would see its power over customers increase due to size, which in turn would translate into additional shelf space for its products. This would represent an increase in Total Revenues of 0.1 percentage points for both Kraft-Heinz and Kimberly-Clark, across the forecast period. Additionally, Kraft-Heinz was assumed to benefit from Kimberly-Clark's expertise in emerging markets such as China, which in turn would translate into another increase of 0.1 percentage points, this time just benefiting Kraft-Heinz Revenues. Each company's Revenues, taking into account these effects are presented in Exhibit 11.31.

7.2.2. Cost synergies

Research shows that cost improvements are easier to obtain[26]. At the same time, improving operational efficiency, through methods such as zero-based budgeting, is what the Acquirer in this transaction is expert at doing. For those reasons, the bulk of this deal's synergies come from cost-cutting measures.

It was also assumed that Kraft-Heinz is already performing at its maximum operational efficiency (evidenced by its intention to acquire other companies) and so, Kimberly-Clark would be the one benefiting from cost synergies.

To estimate said synergies, several steps were taken (Exhibit 11.32). First, a list of similar transactions made by the owners of Kraft-Heinz was computed. Next, the improvements in COGS and SG&A (as a percentage of Revenues) in the years after each merger/acquisition were analyzed, to provide a sense of what to expect for Kimberly-Clark after Kraft-Heinz's management team takes over. Then, Kimberly-Clark's post-acquisition COGS and SG&A were

[25] (Roll, 1986)
[26] (Sirower & Sahni, 2006)

computed, based on the average improvements of these past transactions and assuming that it would take 4 years for those improvements to fully take place.

M&A in mature industries such as this one are often accompanied by cutting redundant jobs and for that end, it was assumed that Kimberly-Clark could reduce its pre-merger number of employees by the same percentage reduction that Kraft-Heinz did after its own merger. It was assumed that it would take two years to cut redundant jobs, and after that, the number of employees would stabilize. Reducing the workforce would lead to cost-savings in terms of wages, but also to severance payments as employees were fired. As so, it was assumed that for each job cut, the respective employee would be given three years' worth of wages in termination benefits.

Job reductions are often accompanied by the closing of older, inefficient plants. In the three years after Heinz merged with Kraft, 6 of its initial 86 plants were closed. Based on this, it was assumed that Kimberly-Clark would close the same percentage of its 93 plants, during not 2, but 3 years. Each plant, and machinery contained in it, was assumed to be sold at its carrying amount, which was computed by dividing the carrying amount of all Building, Machinery and Equipment by the total number of plants.

Nevertheless, cutting the costs mentioned above, but not investing in new plants and machinery would only reduce the new firm's productive capacity. As so, it was also assumed that there would be an investment in new, state-of-the-art facilities that would enable the company to produce more with fewer jobs and plants. This investment was estimated by analyzing the CAPEX of Kraft-Heinz in 2015 (the year of the merger) compared to the NPPE of the same company in 2014.

Overall, this method of looking at past transactions made by the same managers/owners was chosen over the common approach of looking at similar and recent transactions because 3G Capital has accumulated considerable experience in acquiring and improving companies in the Consumer Staples sector over the years. As so, it was felt that it would serve as a better proxy for what could be achieved in this particular deal than similar but motivationally-different transactions.

7.3. Combined company with synergies

As mentioned before, synergies were computed not for the whole combined firm, but instead looked at through their effects on each would-be individual company, after the acquisition. For this end, the financial statements of Kraft-Heinz and Kimberly-Clark, post-acquisition, were computed by combining their stand-alone financial statements with the effects arising from each synergy.

Then, much like what was done for the combined company without synergies, the three statements of each individual company, post-acquisition, were added up together (Exhibits 11.34, 11.35, and 11.36), to obtain the combined company with synergies. This company represents the *de facto* company that would arise, should this acquisition succeed.

In reality, not all items were simply added up together. Some of them, given their interactions with vital parts of the deal, cannot be simply added together. Those items include Interest Expenses and Income, Goodwill created by the acquisition, the Equity of Kimberly-Clark, Dividends , the Debt issued to finance the acquisition, and the FCF after Goodwill.

Interest Expenses for the combined company were no longer computed based on the historical ratio of interest expenses to Interest-bearing Liabilities, but rather based on the spread over the risk-free rate that the combined company would have to pay, multiplied by the value of the previous year's Interest-bearing Liabilities. This spread was computed using the table presented in Exhibit 11.41 and the r_f computed before. Interest Income for each period was computed assuming that the firm's Excess Cash from the previous year would be invested at the risk-free rate.

Goodwill created by the acquisition was computed based on the price paid by Kraft-Heinz to acquire 100% of Kimberly-Clark. It is explained in greater detail in the chapter dedicated to the Purchase Price Allocation.

To eliminate double-counting of equity items, accounting rules demand the Parent company (Acquirer) to write-off the equity of all subsidiaries (Targets) it acquires, by the proportion of its equity stake in each subsidiary. As so, an item under the combined firm's Equity was created, to subtract Kimberly-Clark's Equity and avoid this double-counting.

Due to the increase in leverage from the acquisition, Dividends were assumed to be halted (or at least just equal to Net Income) until the debt issued to pay for Kimberly-Clark was repaid,

and that all Excess Cash would be used to repay it, thus bringing the company's leverage to more manageable levels.

Total Debt also increased, due to the issuance of Debt to finance the acquisition. This item is directly linked to the price paid for Kimberly-Clark, and will be discussed in detail in the chapter dedicated to Financing the Deal.

FCF after Goodwill is just a byproduct of FCF before Goodwill and the Investment in Goodwill resulting from the acquisition.

Exhibit 11.37 presents an analysis of the said company, in terms of Revenue growth, Operating Margins, ROIC, FCF, and Capital Structure, across the forecasted years.

7.4. Synergies Valuation; Cost of capital of the Combined firm

The value created by synergies is used as the paramount driver of the price to be paid for the acquisition. To arrive at said value, the following approach was taken. First, the combined company's cash flows were discounted to the present, to obtain the Enterprise Value of the new company. Then, the Enterprise Values of each stand-alone company was subtracted, thus arriving at the value created by synergies.

7.4.1. DCF/WACC

Since the WACC method relied on a stable capital structure and the combined firm's Capital Structure changes significantly across the forecast period, WACC was considered an unsuitable method.

7.4.2. DCF/APV

Given the reasons mentioned above, APV was considered as a better method to evaluate the combined company. The method was used exactly as before to evaluate each stand-alone company, with the only differences being the inputs used for it (Exhibit 11.33).

The combined company's Unlevered Cost of Equity (k_u) of 5.12% was computed by weighting each company's k_u by their respective EV. Each year's Cost of Debt (Exhibit 11.38) was used

as the discount rate for their corresponding ITS, to reflect its perceived risk. For the value of the ITS in perpetuity, a discount rate of 3.63% was used. This discount rate represents the Cost of Debt of the firm on the last year of projections. The combined company's Probability of Default was computed resorting to the table presented in Exhibit 11.41 and was based on the Interest Coverage Ratio of 2018. The value lost in the event of default was assumed at 30% of the Value from Operations[27].

With those inputs, the combined firm is estimated to have an Enterprise Value of $197 418 Million. Subtracting from it the stand-alone value of each company ($115 919 Million for Kraft-Heinz and $52 593 Million for Kimberly-Clark), as obtained in the APV valuation, synergies were estimated to create value of $28 906 Million (Exhibit 11.39).

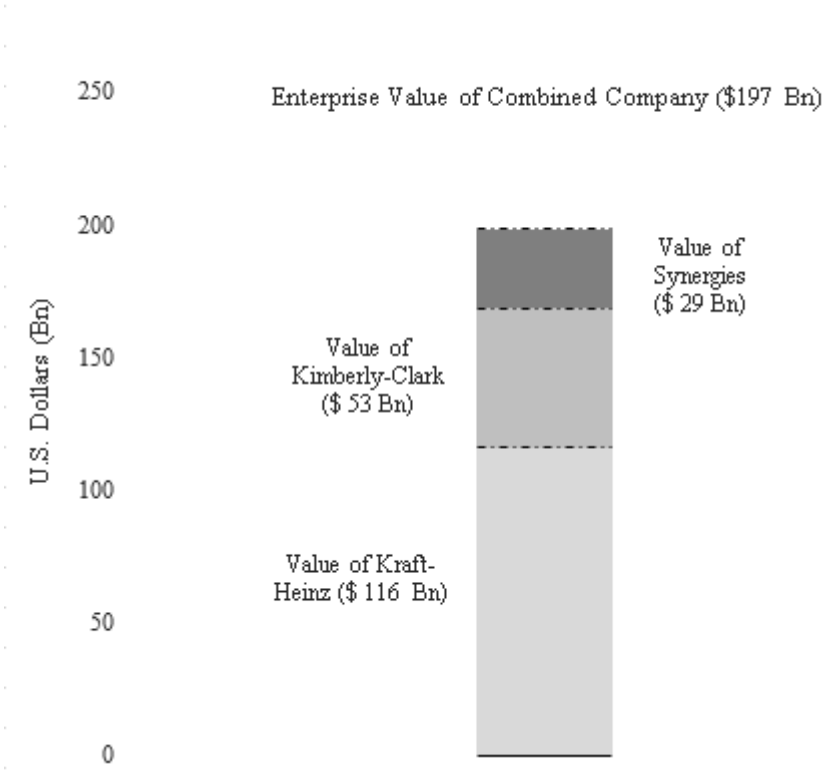

Figure 6 *– Breakdown of Combined Company's Value*

[27] (Passov, 2003)

7.5. Sensitivity and Scenario Analysis

Following the approach taken earlier, when evaluating each individual company, sensitivity and scenario analysis were done to each synergy, in order to assess their impact on the total value of synergies, which in turn drives the price to be paid for Kimberly-Clark.

Sensitivity Analysis

The sensitivity analysis was built much like what was done before, with a normal case, a pessimistic case (-10%) and an optimistic case (+10%), for every synergy incorporated in the deal. From the results (Exhibit 11.40), it is observable that the synergies in COGS and in SG&A have the largest impact on the overall value of synergies. A reduction of 10% in the improvements (per year) in COGS would lead to a decrease in the total value of the deal's synergies of 8.03%, whereas an improvement in COGS 10% higher than estimated would lead to an increase of 7.87%. Synergies in SG&A, despite being the second on the list of most impactful synergies, would only affect the total value of synergies in around 3.0% if they were wrongly estimated by 10%.

Scenario Analysis

To have an idea of how much the value of synergies would change if all synergies changed together, two scenarios were built (Exhibit11.43). An optimistic one, where all synergies were assumed to be 10% higher, and a pessimistic one where, conversely, all synergies were assumed to be 10% lower.

The optimistic scenario would change the value of total synergies created by 12.5%, increasing the premium to pay to 45.9%, up from the 40.8% estimated. On the other hand, the pessimistic scenario would reduce the value created by synergies in 12.7%, effectively reducing the premium to pay to 35.6%.

8. Negotiation

8.1. Premium to pay

As mentioned before, the value obtained from the synergies created ($28 906 Million) was assumed to be the key driver of the price to pay for the acquisition. With these synergies, the maximum premium Kraft-Heinz should pay in order to still break even would be 81.6%, based on the market value of Kimberly-Clark's equity ($35 435 Million)[28]. However, if a premium of 81.6% over Kimberly-Clark's share price was paid, the deal would create zero value for Kraft-Heinz shareholders. For this reason, it was assumed that Kraft-Heinz would make its largest offer at half (40.8%) of the maximum premium. This value implies an offer of $145.31 per share of Kimberly-Clark, trading at $103.21.

By only paying up to half of the maximum price, the value created from the deal is split equally between the Acquirer's and the Target's shareholders, and the Acquirer potentially safe-guards itself against the risk of negatively misjudging the effect of the synergies generated by the deal.

It was assumed that Kraft-Heinz can acquire 100% of Kimberly-Clark's shares. Since the offer is considerably higher than Kimberly-Clark's stock price, all shareholders will potentially want to sell their stakes during the takeover.

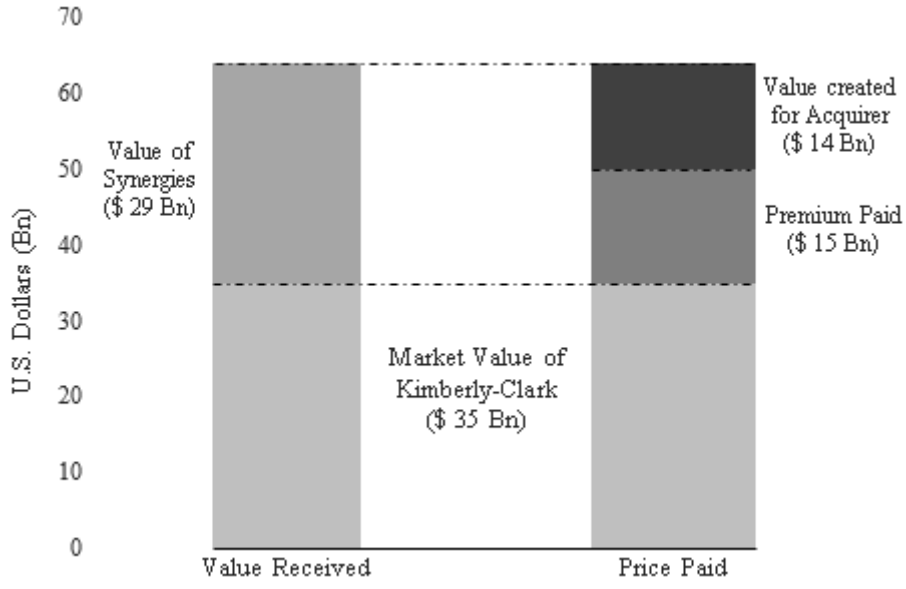

***Figure 7** – Price Paid and Value Received*

[28] Based on stock price and shares outstanding as of May, 2018.

8.2. Financing the Deal

Purchasing 100% of Kimberly-Clark's shares at a price of $145.31 leads to a Total Consideration Paid of $49 888 Million. Assuming that all of Kraft-Heinz's Excess Cash of 2017 ($1 457 Million) is used, the firm would still need to issue $48 431 Million in Debt. This debt was incorporated in the combined firm's financial statements under the name Debt to finance the acquisition. The issuance of debt led to an increase of leverage, which in turn lead to a downgrade of the combined company's credit rating, which dictated the Cost of Debt in the years following the acquisition. As mentioned above, the table relating these variables (Exhibit 11.41) was built based on (Damodaran, Investment Valuation: Tools and Techniques for Determining the Value of Any Assets, 2012).

8.3. Purchase Price Allocation

After a company acquires another, the former becomes the Parent company, with the latter becoming a Subsidiary. Since Kraft-Heinz (the Parent) is acquiring 100% of Kimberly-Clark (the Subsidiary) at a price above its fair value (Market Value), Goodwill is created as a byproduct of the acquisition. (Exhibit 11.42). Assuming that there are no Hidden Reserves behind Kimberly-Clark's identifiable assets, its Revalued Equity amounts to $8 556 Million. As Kraft-Heinz acquires 100% of the target, there are no minority shareholders in the company and thus there is no creation of NCIs with the acquisition.

By subtracting the Revalued Equity from the Total Consideration Paid of $49 888 Million, a Goodwill of $41 332 is created by the deal and incorporated in the financial statements of the newly created company under the item "Goodwill created from acquisition".

8.4. Form of payment

This transaction was assumed to be paid 100% with cash for several reasons. Firstly, the target's indebtedness is relatively low, which provides room for a transaction paid with cash and financed with debt. Secondly, because in terms of risk management, a deal entirely paid with cash concentrates all the risks and rewards into the acquirer's shareholders. Selling shareholders may find it positive not to bear the post-merger risks that such a large transaction usually carries. On the other hand, given the confidence of the managers in their capacity to generate the

synergies mentioned above, confidence that comes from deep expertise in the field, they may find it worthwhile to bear these risks, since they will reap the entirety of the rewards.

8.5. Approaching the Target

As mentioned in the Literature Review, if an acquisition allows for the creation of synergies or the replacement of underperforming management teams, a hostile approach might be justified and lead to positive returns for the acquirer.

However, with Warren Buffett's Berkshire Hathaway Inc. owning 26.7% of Kraft-Heinz and Mr. Buffett's reluctance of entering unfriendly takeover attempts, Kimberly-Clark's management team should be approached on a friendly basis, which would in turn facilitate post-merger integration.

9. Post-Merger Integration

As mentioned in the Literature Review**,** a carefully planned post-merger integration is vital to the value creation process of the acquisition and should be executed quickly, to minimize the typical uncertainty that characterize a deal such as this and hastily tap in the synergies behind it.

The closing of 6 plants and reduction of 2 946 jobs, mentioned before, are part of the PMI plan for the acquisition.

In accordance with (Till Vestring, 2003), Kraft-Heinz's culture and discipline should be imposed on the target, to enable the cost synergies referred above. The management team should also reexamine the asset composition of the firm and, if any asset is deemed as no longer fitting the long term strategy of the firm, it should be divested.

10. Conclusion

The Kraft-Heinz Company is potentially looking for a new target to acquire. It has completed the integration of Heinz and Kraft, and now that the firm is generating steady cash flows, it is reportedly seeking a new target to acquire and improve, following the traditional approach of its owners/managers, 3G Capital. During the last 2 decades, 3G Capital employed this method several times.

Kimberly-Clark Corporation poses as a suitable target for the acquisition. It possesses strong and well-known brands, improvable operating margins, a growing presence in emerging markets, and low leverage levels.

By acquiring Kimberly-Clark, Kraft-Heinz can tap into Kimberly-Clark's increased revenue growth rates, while providing the battle-hardened expertise required to increase the latter's operational profitability and cash flow generation. In this transaction, assumed to be made at a premium of 40.8% over Kimberly-Clark's stock price of $103.21, Kraft-Heinz acquires 100% of Kimberly-Clark's shares outstanding, effectively paying $49 888 Million in an all-cash friendly offer, financed with the firm's $1 457 Million of excess cash, and an issuance of $48 431 Million in debt. The acquisition is expected to decrease the combined firm's credit rating in the first years, but with the operational improvements obtained, its capital structure improves to normal levels in 7 years.

To generate the synergies behind this deal, Kraft-Heinz is assumed to impose its corporate culture on the target and invest in new, state-of-the-art facilities, while at the same time closing 6 old plants and cutting around 3 000 jobs in the years following the transaction.

11. Appendices

11.1. Kraft-Heinz's Historical Statement of NOPLAT

	2013	2014	2015	2016	2017
Statement of NOPLAT - Mn €					
Description					
Net sales	**6 240**	**10 922**	**18 338**	**26 487**	**26 232**
(-) COGS	4 311	6 766	11 780	14 862	15 206
(-) Selling, General, and Administrative Expenses	1 502	2 063	3 122	3 143	2 748
(-) Other operating expenses	-3	-5	57	-9	-37
EBITDA	**430**	**2 098**	**3 379**	**8 491**	**8 315**
(-) Depreciation	231	430	740	1 069	757
(-) Amortization	49	100	0	268	279
EBIT	**150**	**1 568**	**2 639**	**7 154**	**7 279**
(-) Operating cash taxes	-273	294	471	2 351	-4 099
NOPLAT	**423**	**1 274**	**2 168**	**4 803**	**11 378**
Reconciliation with net income (from Net Income to NOPLAT)					
Net Income	**-77**	**657**	**634**	**3632**	**10999**
Decrease (increase) in Operating Deferred Taxes	298	174	317	29	6467
Adjusted Net Income	**221**	**831**	**951**	**3661**	**17466**
(+) Non Operating taxes	-257	-337	-422	-999	-7828
(-) Interest Income	-13	-33	0	0	0
(+) Interest Expense	409	686	1082	1130	1230
(-) Other income/ (+) other expenses	-17	189	457	-119	142
(-) Losses/ (+) Gains in Derivatives	-89	-77	87	108	-129
(-)Net Income Attributable to NCIs	5	15	13	10	-9
(-) Extraordinary gains/ (+) Extraordinary expenses	164	0	0	1012	506
NOPLAT	**423**	**1274**	**2168**	**4803**	**11378**

11.2. Kraft-Heinz's Historical Statement of Invested Capital

INVESTED CAPITAL - Mn €					
Description					
OPERATING WORKING CAPITAL					
Operating current assets	2911	2674	4727	4950	5809
(-) Operating current liabilities	-2501	-2925	-5686	-6356	-6510
Total	**410**	**-251**	**-959**	**-1406**	**-701**
FIXED ASSETS CAPITAL					
Net property, plant and equipment (NPPE)	2663	2365	6524	6688	7120
(+) Other assets, net of other liabilities	707	862	746	811	556
Total	**3370**	**3227**	**7270**	**7499**	**7676**
OPERATING INTANGIBLE ASSETS					
Net Intangible Assets	14490	13188	62120	59297	59449
Total	**14490**	**13188**	**62120**	**59297**	**59449**
INVESTED CAPITAL WITHOUT GOODWILL	**18270**	**16164**	**68431**	**65390**	**66424**
(+) Goodwill	15070	14959	43051	44125	44824
INVESTED CAPITAL WITH GOODWILL	**33340**	**31123**	**111482**	**109515**	**111248**
(+) Excess Cash	2533	2241	5053	3803	1457
(+) Assets related with derivatives net of Liab. Related to derivatives	68	0	0	0	0
TOTAL INVESTOR FUNDS	**35941**	**33364**	**116535**	**113318**	**112705**

	2013	2014	2015	2016	2017
Equity	**16296**	**15437**	**66005**	**57358**	**66034**
Preferred stock	*8320*	*8320*	*8320*	*0*	*0*
Common stock	*9*	*4*	*-19*	*-195*	*-212*
Paid-in Capital	*7445*	*7320*	*58375*	*58593*	*58711*
Retained Earnings	*-77*	*0*	*0*	*588*	*8589*
Currency translation	*22*	*-574*	*-1646*	*-2412*	*-1587*
Acc. Other Comprehensive Income	*0*	*0*	*0*	*0*	*0*
Other	*577*	*367*	*975*	*784*	*533*
(+) Deferred Income Tax Liabilities, net of Assets	4161	3867	21497	20848	14076
(+) Dividends Payable	0	0	762	39	0
Adjusted Equity	**20457**	**19304**	**88264**	**78245**	**80110**
Debt (interest bearing liabilities)					
Short-term Debt	424	167	484	3106	3622
Interest Payable	172	167	401	415	419
Comercial paper	144	0	4	645	460
Debt payable within one year (current portion of LT debt)	108	0	79	2046	2743
Long-Term debt	14618	13358	25151	29713	28333
Pension Liabilities	196	287	2405	2038	427
Non-Controlling Interests	246	248	231	216	213
Total Debt	**15484**	**14060**	**28271**	**35073**	**32595**
TOTAL INVESTOR FUNDS	**35941**	**33364**	**116535**	**113318**	**112705**

11.3. Kraft-Heinz's Historical Statement of Free Cash Flow

Free Cash Flow Statement - Mn €					
Description					
NOPLAT	**423**	**1274**	**2168**	**4803**	**11378**
(+) Depreciation	231	430	740	1069	757
(+) Amortization of Operational Intangibles	49	100	0	268	279
(=) Gross Cashflow	**703**	**1804**	**2908**	**6140**	**12414**
Investment in Working Capital	33	-660	-709	-447	705
Capex	410	132	4899	1501	1468
Investment in other non-current operating assets	355	155	-116	65	-255
Investment in Intangible assets	12991	-1302	48932	-2823	152
Gross Investment	**13789**	**-1675**	**53006**	**-1704**	**2070**
Free Cash Flow before Goodwill	**-13086**	**3479**	**-50099**	**7844**	**10344**
Investment in Goodwill	11884	-111	28092	1074	699
Free Cash Flow after Goodwill and Intangibles	**-24970**	**3590**	**-78191**	**6770**	**9645**

11.4. Kraft-Heinz's Historical Analysis

Historical Analysis - Key measures	2013	2014	2015	2016	2017
Revenue growth rate	-45,8%	75,0%	67,9%	44,4%	-1,0%
EBITDA margin	6,9%	19,2%	18,4%	32,1%	31,7%
NOPLAT margin	6,8%	11,7%	11,8%	18,1%	43,4%
ROIC without Goodwill	3,7%	7,4%	5,1%	7,2%	17,3%
Free Cash Flow without Goodwill	-13086	3479	-50099	7844	10344
Interest Coverage Ratio	1,1	3,1	3,1	7,5	6,8
Debt-to-Equity	0,76	0,73	0,32	0,45	0,41

11.5. Kimberly-Clark's Historical Statement of NOPLAT

Statement of NOPLAT - Mn €	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Description										
Net sales	**19415**	**19115**	**19746**	**20846**	**19467**	**19561**	**19724**	**18591**	**18202**	**18259**
(-) COGS	12782	11912	12383	13196	12481	12089	12179	11221	10846	10982
(-) Selling, General, and Administrative Expenses	3291	3498	3673	3755	3757	3699	3709	3443	3326	3227
(-) Other operating expenses	20	97	104	362	-5	7	453	1568	8	27
EBITDA	**3322**	**3608**	**3586**	**3533**	**3234**	**3766**	**3383**	**2359**	**4022**	**4023**
(-) Depreciation	763	765	788	1067	857	863	862	746	705	724
(-) Amortization	12	18	25	24	0	0	0	0	0	0
EBIT	**2547**	**2825**	**2773**	**2442**	**2377**	**2903**	**2521**	**1613**	**3317**	**3299**
(-) Operating cash taxes	761	1096	885	666	813	1835	602	538	785	880
NOPLAT	**1786**	**1729**	**1888**	**1776**	**1564**	**1068**	**1919**	**1075**	**2532**	**2419**
Reconciliation with net income (from Net Income to NOPLAT)										
Net Income	1690	1884	1843	1591	1750	2142	1526	1013	2166	2278
Decrease (increase) in Operating Deferred Taxes	91	-179	59	182	0	-817	230	-179	234	137
(=) Adjusted Net Income	**1781**	**1705**	**1902**	**1773**	**1750**	**1325**	**1756**	**834**	**2400**	**2415**
(+) Non Operating taxes	-234	-171	-156	-188	-153	-190	24	59	-97	-165
(-) Interest Income	-60	-39	-32	-26	-18	-20	-18	-17	-11	-10
(+) Interest Expense	318	288	255	285	285	282	284	295	319	318
(-) Other income/ (+) other expenses	0	0	0	0	0	0	0	0	0	0
(-) Share of net income in equity companies	-166	-164	-181	-161	-177	-205	-146	-149	-132	-104
(-) Net Income Attributable to NCIs	139	110	100	93	78	79	69	53	53	41
(-) Extraordinary gains/ (+) Extraordinary expenses	8	0	0	0	-201	-203	-50	0	0	-76
NOPLAT	**1786**	**1729**	**1888**	**1776**	**1564**	**1068**	**1919**	**1075**	**2532**	**2419**

11.6. Kimberly-Clark's Historical Statement of Invested Capital

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
INVESTED CAPITAL - Mn €										
Description										
OPERATING WORKING CAPITAL										
Operating current assets	5565	5123	5240	5936	5872	5887	5164	5179	4556	4960
(-) Operating current liabilities	-3429	-4063	-4219	-4414	-4687	-4658	-4590	-4362	-4384	-4564
Total	**2136**	**1060**	**1021**	**1522**	**1185**	**1229**	**574**	**817**	**172**	**396**
FIXED ASSETS CAPITAL										
Net property, plant and equipment (NPPE)	7667	8033	8356	8049	7896	7752	7182	6940	7006	7263
(+) Other assets, net of other liabilities	631	560	499	-310	-28	271	295	145	189	396
Total	**8298**	**8593**	**8855**	**7739**	**7868**	**8023**	**7477**	**7085**	**7195**	**7659**
OPERATING INTANGIBL ASSETS										
Net Intangible Assets	121	297	287	265	246	243	109	94	83	0
Total	**121**	**297**	**287**	**265**	**246**	**243**	**109**	**94**	**83**	**0**
INVESTED CAPITAL WITHOUT GOODWILL	**10555**	**9950**	**10163**	**9526**	**9299**	**9495**	**8160**	**7996**	**7450**	**8055**
(+) Goodwill	2743	3275	3403	3340	3337	3181	1628	1446	1480	1576
INVESTED CAPITAL WITH GOODWILL	**13298**	**13225**	**13566**	**12866**	**12636**	**12676**	**9788**	**9442**	**8930**	**9631**
(+) Excess Cash	117	605	683	347	717	663	395	247	559	251
(+) Non operating investments	927	962	985	732	949	578	434	411	420	406
TOTAL INVESTOR FUNDS	**14342**	**14792**	**15234**	**13945**	**14302**	**13917**	**10617**	**10100**	**9909**	**10288**
Equity	**3878**	**5406**	**5917**	**5249**	**4985**	**4856**	**729**	**-174**	**-102**	**629**
Preferred stock	0	0	0	0	0	0	0	0	0	0
Common stock	598	598	598	536	536	536	536	473	473	473
Paid-in Capital	486	399	425	440	481	594	632	609	697	776
Own shares	-4285	-4087	-4726	-2105	-2796	-3746	-5597	-2972	-3629	-4431
Retained Earnings	9465	10329	11086	8244	8823	9714	8470	4994	5831	6730
Currency translation	0	0	0	0	0	0	0	0	0	0
Acc. Other Comprehensive Income	-2386	-1833	-1466	-1866	-2059	-2242	-3312	-3278	-3474	-2919
Other	0	0	0	0	0	0	0	0	0	0
(+) Deferred Income Tax Liabilities, net of Assets	251	409	442	0	0	817	587	766	532	395
(+) Dividends Payable	240	250	269	277	289	309	310	318	329	341
Adjusted Equity	**4369**	**6065**	**6628**	**5526**	**5274**	**5982**	**1626**	**910**	**759**	**1365**
Debt (interest bearing liabilities)										
Short-term Debt	1083	610	850	706	1115	881	1326	1669	1133	953
Comercial paper	218	0	0	0	0	0	0	0	0	0
Other short term debt	188	107	0	0	0	0	0	0	0	0
Debt payable within one year (current portion of LT debt)	677	503	344	706	1115	375	1326	1669	1133	953
Redeemable Preferred Securities	0	0	506	0	0	506	0	0	0	0
Long-Term debt	5893	5844	5661	5973	5619	5458	5702	6170	6497	6533
Long-Term debt (regular)	4882	4792	5120	5426	5070	5386	5630	6106	6439	6472
Redeemable Prefered Securities in Sub	1011	1052	541	547	549	72	72	64	58	61
Pension Liabilities	2593	1989	1810	1460	1992	1312	1693	1137	1301	1184
Non-Controlling Interests	404	284	285	280	302	284	270	214	219	253
Total Debt	**9973**	**8727**	**8606**	**8419**	**9028**	**7935**	**8991**	**9190**	**9150**	**8923**
TOTAL INVESTOR FUNDS	**14342**	**14792**	**15234**	**13945**	**14302**	**13917**	**10617**	**10100**	**9909**	**10288**

11.7. Kimberly-Clark's Historical Statement of Free Cash Flow

Free Cash Flow Statement - Mn €	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Description										
NOPLAT	**1786**	**1729**	**1888**	**1776**	**1564**	**1068**	**1919**	**1075**	**2532**	**2419**
(+) Depreciation	763	765	788	1067	857	863	862	746	705	724
(+) Amortization of Operational Intangibles	12	18	25	24	0	0	0	0	0	0
Gross Cashflow	**2561**	**2512**	**2701**	**2867**	**2421**	**1931**	**2781**	**1821**	**3237**	**3143**
Investment in Working Capital	243	-1076	-39	501	-337	44	-655	242	-645	224
Capex	336	1131	1111	760	704	719	292	504	771	981
Investment in other non-current operating assets	34	-71	-61	-809	282	299	24	-150	44	207
Investment in Intangible assets	-11	176	-10	-22	-19	-3	-134	-15	-11	-83
Gross Investment	**602**	**160**	**1001**	**430**	**630**	**1059**	**-473**	**581**	**159**	**1329**
Free Cash Flow before Goodwill	**1959**	**2352**	**1700**	**2437**	**1790**	**872**	**3253**	**1240**	**3078**	**1813**
Investment in Goodwill	-199	532	128	-63	-3	-156	-1553	-182	34	96
Free Cash Flow after Goodwill and Intangibles	**2158**	**1820**	**1572**	**2500**	**1793**	**1028**	**4806**	**1422**	**3044**	**1717**

11.8. Kimberly-Clark's Historical Analysis

Historical Analysis - Key measures										
Revenue growth rate	6,3%	-1,5%	3,3%	5,6%	-6,6%	0,5%	0,8%	-5,7%	-2,1%	0,3%
EBITDA margin	17,1%	18,9%	18,2%	16,9%	16,6%	19,3%	17,2%	12,7%	22,1%	22,0%
NOPLAT margin	9,2%	9,0%	9,6%	8,5%	8,0%	5,5%	9,7%	5,8%	13,9%	13,2%
ROIC without Goodwill	16,8%	16,9%	18,8%	18,0%	16,6%	11,4%	21,7%	13,3%	32,8%	31,2%
Free Cash Flow without Goodwill	1959	2352	1700	2437	1790	872	3253	1240	3078	1813
Interest Coverage Ratio	10,4	12,5	14,1	12,4	11,3	13,4	11,9	8,0	12,6	12,7
Debt-to-Equity	2,28	1,44	1,30	1,52	1,71	1,33	5,53	10,10	12,06	6,54

11.9. Kraft-Heinz's Performance Drivers

	2013	2014	2015	2016	2017
SoNOPLAT items (as % of Revenues)					
COGS	69,1%	61,9%	64,2%	56,1%	58,0%
Selling, General, and Administrative Expenses	24,1%	18,9%	17,0%	11,9%	10,5%
Other Operating Expenses	0,0%	0,0%	0,3%	0,0%	-0,1%
EBITDA margin	**6,9%**	**19,2%**	**18,4%**	**32,1%**	**31,7%**
Depreciation (as % of last year's NPPE)	9,3%	16,1%	31,3%	16,4%	11,3%
Amortization	3,3%	0,7%	0,0%	0,4%	0,5%
EBIT Margin	**2,4%**	**14,4%**	**14,4%**	**27,0%**	**27,7%**
Operating cash taxes (as % of EBIT)	181,7%	-18,8%	-17,9%	-32,9%	56,3%
NOPLAT	**6,8%**	**11,7%**	**11,8%**	**18,1%**	**43,4%**
SoIC items (as % of Revenues)					
OPERATING WORKING CAPITAL					
Inventories (as % of COGS)	33,3%	17,5%	22,2%	18,1%	18,5%
Receivables	17,6%	6,3%	4,7%	2,9%	3,5%
Working Cash	2,0%	2,0%	2,0%	2,0%	2,0%
Prepaid Expenses	2,3%	0,0%	0,0%	0,0%	0,0%
Other Current Assets	1,0%	5,3%	4,7%	3,7%	3,7%
Income taxes receivable	0,0%	0,0%	0,0%	0,0%	2,2%
Current Assets related to Derivatives	0,7%	0,0%	0,0%	0,0%	0,0%
Total current assets	**46,6%**	**24,5%**	**25,8%**	**18,7%**	**22,1%**
Accounts payable (as % of COGS)	27,7%	24,4%	24,1%	26,9%	29,3%
Other current liabilities	2,3%	6,7%	6,8%	4,5%	4,5%
Accrued Expenses	15,4%	2,7%	4,7%	2,8%	2,6%
Income taxes payable	3,2%	2,3%	4,1%	1,6%	0,8%
Current Liabilities related to Derivatives	0,1%	0,0%	0,0%	0,0%	0,0%
Total current liabilities	**40,1%**	**26,8%**	**31,0%**	**24,0%**	**24,8%**
FIXED ASSETS CAPITAL					
Net PPE	42,7%	21,7%	35,6%	25,3%	27,1%
Other assets, net of other liabilities	11,3%	7,9%	4,1%	3,1%	2,1%
Operating Intangible Assets					
Net Intangible Assets	232,2%	120,7%	338,8%	223,9%	226,6%

11.10. Kraft-Heinz's Forecasted Statement of NOPLAT

Forecasted Statement of NOPLAT- $ Million	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Description															
Net sales	**26248**	**26593**	**26976**	**28014**	**28752**	**29151**	**29556**	**29967**	**30383**	**30805**	**31233**	**31667**	**32107**	**32553**	**33005**
(-) COGS	15215	15415	15637	16239	16667	16898	17133	17371	17612	17857	18105	18357	18612	18870	19132
(-) Selling, General, and Administrative Expenses	2932	2971	3013	3129	3212	3256	3302	3348	3394	3441	3489	3538	3587	3637	3687
(-) Other operating expenses	2	5	9	-6	-6	1	1	1	1	1	1	1	1	1	1
EBITDA	**8098**	**8202**	**8316**	**8652**	**8879**	**8996**	**9121**	**9247**	**9376**	**9506**	**9638**	**9772**	**9908**	**10045**	**10185**
(-) Depreciation	946	1062	1076	1092	1134	1164	1180	1196	1213	1230	1247	1264	1282	1300	1318
(-) Amortization	272	270	270	270	270	270	270	270	270	270	270	270	270	270	270
EBIT	**6880**	**6869**	**6970**	**7290**	**7475**	**7562**	**7671**	**7781**	**7893**	**8006**	**8121**	**8238**	**8356**	**8476**	**8597**
(-) Operating cash taxes	1565	1563	1586	1658	1701	1720	1745	1770	1796	1821	1848	1874	1901	1928	1956
NOPLAT	**5315**	**5307**	**5384**	**5632**	**5775**	**5842**	**5926**	**6011**	**6097**	**6185**	**6274**	**6364**	**6455**	**6548**	**6641**
Reconciliation with net income (from NOPLAT to Net Income)															
Interest Expense	-1198	-1198	-1214	-1232	-1279	-1313	-1331	-1349	-1368	-1387	-1406	-1426	-1446	-1466	-1486
Interest Income	19	119	109	32	153	133	184	237	291	345	401	457	514	572	631
Other non-operating Income	-561	-632	-714	-724	-674	-705	-715	-725	-735	-745	-755	-766	-776	-787	-798
Non-operational Taxes	595	586	623	658	616	645	637	629	620	611	603	594	584	575	566
Net Income	**4171**	**4181**	**4188**	**4367**	**4591**	**4602**	**4701**	**4802**	**4905**	**5010**	**5115**	**5223**	**5332**	**5442**	**5554**

11.11. Kraft-Heinz's Forecasted Statement of Invested Capital

Forecasted Stat. Of Invested Capital - $ Million	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPERATING WORKING CAPITAL															
Current assets	5346	5440	5547	5797	5993	6001	6084	6169	6254	6341	6429	6519	6609	6701	6794
Current liabilities	6511	6550	6642	6793	6987	7148	7248	7348	7450	7554	7659	7765	7873	7982	8093
Total	**-1164**	**-1110**	**-1095**	**-996**	**-994**	**-1147**	**-1163**	**-1179**	**-1196**	**-1212**	**-1229**	**-1246**	**-1264**	**-1281**	**-1299**
FIXED ASSETS CAPITAL															
Net PPE	7995	8100	8217	8533	8758	8879	9003	9128	9255	9383	9514	9646	9780	9916	10053
Other assets, net of other liabilities	1495	1215	1053	1084	1159	1286	1304	1322	1341	1359	1378	1397	1417	1436	1456
Total	**9490**	**9315**	**9269**	**9617**	**9917**	**10166**	**10307**	**10450**	**10595**	**10743**	**10892**	**11043**	**11197**	**11352**	**11510**
OPERATING INTANGIBLE ASSETS															
Net Intangible Assets	59961	60549	67191	64752	66876	68153	69099	70059	71033	72019	73020	74034	75063	76105	77163
Total	**59961**	**60549**	**67191**	**64752**	**66876**	**68153**	**69099**	**70059**	**71033**	**72019**	**73020**	**74034**	**75063**	**76105**	**77163**
INVESTED CAPITAL WITHOUT GOODWILL	**68287**	**68754**	**75366**	**73373**	**75799**	**77171**	**78243**	**79330**	**80432**	**81549**	**82682**	**83831**	**84995**	**86176**	**87373**
Goodwill	44824	44824	44824	44824	44824	44824	44824	44824	44824	44824	44824	44824	44824	44824	44824
INVESTED CAPITAL WITH GOODWILL	**113111**	**113578**	**120190**	**118197**	**120623**	**121995**	**123067**	**124154**	**125256**	**126373**	**127506**	**128655**	**129819**	**131000**	**132197**
Excess Cash	9161	8361	2480	11774	10172	14088	18169	22308	26507	30767	35088	39471	43918	48428	53004
TOTAL INVESTOR FUNDS	**122272**	**121938**	**122670**	**129971**	**130795**	**136083**	**141236**	**146462**	**151763**	**157140**	**162594**	**168126**	**173737**	**179428**	**185201**
Equity															
Common stock	-212	-212	-212	-212	-212	-212	-212	-212	-212	-212	-212	-212	-212	-212	-212
Ending Retained Earnings	11765	6785	2612	4499	0	0	0	0	0	0	0	0	0	0	0
Starting retained earnings	8589	11765	6785	2612	4499	0	0	0	0	0	0	0	0	0	0
(+) Net Income	4171	4181	4188	4367	4591	4602	4701	4802	4905	5010	5115	5223	5332	5442	5554
(-) Dividends	995	9161	8361	2480	9090	4602	4701	4802	4905	5010	5115	5223	5332	5442	5554
Paid-in Capital	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711
Deferred Income Tax Liabilities, net of Assets	18230	22377	26586	30987	35500	40066	44697	49395	54160	58994	63897	68871	73916	79033	84224
Adjusted Equity	**88494**	**87662**	**87697**	**93985**	**93999**	**98565**	**103196**	**107894**	**112659**	**117493**	**122396**	**127370**	**132415**	**137532**	**142723**
Debt (interest bearing liabilities)															
Short-term Debt	3624	3672	3725	3868	3970	4025	4081	4138	4195	4253	4313	4372	4433	4495	4557
Long-Term debt	28350	28723	29137	30258	31055	31486	31924	32367	32817	33273	33735	34204	34679	35160	35649
Newly-Issued Debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pension Liabilities	1481	1633	1846	1566	1486	1713	1737	1761	1786	1810	1836	1861	1887	1913	1940
Non-Controlling Interests	322	248	265	294	285	294	298	302	306	310	315	319	324	328	333
Total Debt	**33778**	**34276**	**34973**	**35986**	**36796**	**37518**	**38039**	**38568**	**39104**	**39647**	**40198**	**40756**	**41322**	**41896**	**42478**
TOTAL INVESTOR FUNDS	**122272**	**121938**	**122670**	**129971**	**130795**	**136083**	**141236**	**146462**	**151763**	**157140**	**162594**	**168126**	**173737**	**179428**	**185201**

11.12. Kraft-Heinz's Forecasted Statement of Free Cash Flow

Forecasted Statement of FCF - $ Million	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Description															
NOPLAT	**5315**	**5307**	**5384**	**5632**	**5775**	**5842**	**5926**	**6011**	**6097**	**6185**	**6274**	**6364**	**6455**	**6548**	**6641**
(+) Depreciation	946	1062	1076	1092	1134	1164	1180	1196	1213	1230	1247	1264	1282	1300	1318
(+) Amortization of Operational Intangibles	272	270	270	270	270	270	270	270	270	270	270	270	270	270	270
Gross Cashflow	**6533**	**6639**	**6731**	**6994**	**7179**	**7275**	**7376**	**7477**	**7580**	**7685**	**7791**	**7898**	**8007**	**8117**	**8229**
Investment in Working Capital	-463	54	16	98	3	-154	-16	-16	-16	-17	-17	-17	-17	-18	-18
Capex	1821	1167	1193	1408	1359	1285	1303	1321	1340	1358	1377	1396	1416	1435	1455
Investment in other non-current operating assets	939	-280	-162	31	75	128	18	18	18	19	19	19	19	20	20
Investment in Intangible assets	784	858	6912	-2169	2394	1547	1217	1230	1243	1257	1270	1284	1298	1313	1327
Gross Investment	**3081**	**1799**	**7959**	**-631**	**3830**	**2806**	**2522**	**2553**	**2585**	**2617**	**2650**	**2683**	**2716**	**2750**	**2785**
Free Cash Flow before Goodwill	**3452**	**4840**	**-1228**	**7625**	**3349**	**4469**	**4854**	**4924**	**4995**	**5068**	**5141**	**5215**	**5290**	**5367**	**5444**
Investment in Goodwill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Free Cash Flow after Goodwill	**3452**	**4840**	**-1228**	**7625**	**3349**	**4469**	**4854**	**4924**	**4995**	**5068**	**5141**	**5215**	**5290**	**5367**	**5444**

11.13. Kraft-Heinz's Forecasted Performance Analysis

Performance Analysis - Key measures															
Revenue growth rate	0,1%	1,3%	1,4%	3,8%	2,6%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%
EBITDA Margin	30,9%	30,8%	30,8%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%
NOPLAT Margin	20,2%	20,0%	20,0%	20,1%	20,1%	20,0%	20,0%	20,1%	20,1%	20,1%	20,1%	20,1%	20,1%	20,1%	20,1%
ROIC without Goodwill	7,9%	7,7%	7,5%	7,6%	7,7%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,7%	7,7%
Interest Coverage Ratio	6,76	6,84	6,85	7,03	6,94	6,85	6,85	6,85	6,85	6,85	6,85	6,85	6,85	6,85	6,85
Debt-to-Equity	0,38	0,39	0,40	0,38	0,39	0,38	0,37	0,36	0,35	0,34	0,33	0,32	0,31	0,30	0,30

11.14. Kraft-Heinz's Cost of Capital

WACC calculation	
Description	
Risk free interest rate	2,98%
Market risk premium	6,1%
Levered Equity Beta	0,45
Levered cost of Equity	5,7%
Cost of Debt	5,2%
Marginal tax rate	36,1%
After-tax Cost of Debt	3,3%
Target Equity/Assets Value	60%
Target Debt/Assets Value	40%
WACC	**4,8%**

APV calculation	
Description	
Risk free interest rate	2,98%
Market risk premium	6,1%
Unlevered Equity Beta	0,32
Unlevered Cost of Equity	4,9%
Interest Tax shield discount factor	5,2%
Marginal tax rate	36,1%
Probability of Default	7,54%
Magnitude of Financial distress costs	30,0%

11.15. Kraft-Heinz's DCF/WACC Valuation

DCF Valuation Summary

Assumptions	
WACC	*4,8%*
Growth rate of NOPLAT in perpetuity	*1,4%*
Expected RONIC	*7,8%*

Year	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**Continuing Value**
Free Cash Flow	3452	4840	-1228	7625	3349	4469	4854	4924	4995	5068	5141	5215	5290	5367	5444	133184
Discount factor	1,048	1,098	1,150	1,205	1,263	1,323	1,386	1,452	1,522	1,594	1,670	1,750	1,834	1,921	2,013	2,109
Discounted FCF	3295	4409	-1067	6327	2652	3378	3502	3391	3283	3179	3078	2980	2885	2794	2705	63154
% of Total Value of Operations	*3,0%*	*4,0%*	*-1,0%*	*5,8%*	*2,4%*	*3,1%*	*3,2%*	*3,1%*	*3,0%*	*2,9%*	*2,8%*	*2,7%*	*2,6%*	*2,5%*	*2,5%*	*57,4%*

Value of Operations	**109945**
Value of Excess cash	1457
Value of Non-operational Investments	0
Enterprise Value	**111402**
Value of Debt	46844
Equity Value	**64558**
Number of Shares outstanding	1220
Value per share	**$52,9**

11.16. Kraft-Heinz's APV Valuation

APV Valuation Summary

Assumptions	
Unlevered cost of equity	*4,9%*
Growth rate of NOPLAT in perpetuity	*1,4%*
Expected RONIC	*7,8%*
Discount rate for ITS	*5,22%*
Marginal tax rate	*36,1%*
Probability of Default	*7,54%*
Magnitude of Fin. Distress costs	*30,0%*

Year	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**Continuing Value**
Free Cash Flow	3452	4840	-1228	7625	3349	4469	4854	4924	4995	5068	5141	5215	5290	5367	5444	127895
Discount factor	1,049	1,101	1,155	1,211	1,271	1,333	1,399	1,468	1,540	1,615	1,695	1,778	1,865	1,957	2,053	2,154
Discounted FCF	3290	4397	-1063	6294	2635	3352	3470	3355	3244	3137	3034	2933	2836	2743	2652	59381
% of Total Value of Operations	*3,1%*	*4,2%*	*-1,0%*	*6,0%*	*2,5%*	*3,2%*	*3,3%*	*3,2%*	*3,1%*	*3,0%*	*2,9%*	*2,8%*	*2,7%*	*2,6%*	*2,5%*	*56,2%*
Value of Operations	**105691**															
Interest expenses	1198	1198	1214	1232	1279	1313	1331	1349	1368	1387	1406	1426	1446	1466	1486	
Marginal tax rate	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	
Interest Tax Shield	432	433	438	445	462	474	480	487	494	501	508	515	522	529	537	14187
Discount factor	1,052	1,107	1,165	1,226	1,289	1,357	1,427	1,502	1,580	1,663	1,749	1,841	1,937	2,038	2,144	2,256
Discounted Interest Tax Shield	411	391	376	363	358	349	337	324	313	301	290	280	270	260	250	6290
Present Value of Interest Tax Shields	11162															
Probability of default	7,54%															
Magnitude of Financial Distress costs	30,0%															
Expected Costs of Financial Distress	2391															
Value of Financing side effects	**8771**															
Value of Excess cash	1457															
Value of Non-operational Investments	0															
Enterprise Value	**115919**															
Value of Debt	46844															
Equity Value	**69075**															
Number of Shares outstanding	1220															
Value per share	**$56,6**															

11.17. Kraft-Heinz's Comparables Valuation

Comparables Valuation Summary

Peer Group: Mondelez
McCormick

Company	Market Value of Equity	Enterprise Value	Net Income (2018)	EBITDA (2018)	EBIT (2018)	Multiples P/E	EV/EBIT	EV/EBITDA
Mondelez	58250	76006	3642	5418	4508	16,0	16,9	14,0
McCormick	13281	18248	654	1122	971	20,3	18,8	16,3
Mean						**18,2**	**17,8**	**15,1**
Median						**18,2**	**17,8**	**15,1**

EV/EBITDA	15,1	of Peer group
EBITDA	8098	of Kraft-Heinz in 2018
Enterprise Value	**122659**	
Value of Debt	46844	
Equity Value	**75814**	
Number of Shares outstanding (June 2018)	1 220	
Value per share	**$62,1**	

11.18. Kraft-Heinz's Sensitivity Analysis

Variable	Effect (%)	Impact on Valuation (%)
COGS % of Revenues	-10	30,40%
WACC	-10	15,90%
Growth rate of NOPLAT in perpetuity	+10	1,20%
RONIC in perpetuity	+10	1,10%
Accs. Payable as % of COGS	+10	0,60%
Inventories as % of COGS	-10	0,40%
Inventories as % of COGS	+10	-0,40%
Accs. Payable as % of COGS	-10	-0,60%
Growth rate of NOPLAT in perpetuity	-10	-1,10%
RONIC in perpetuity	-10	-1,40%
WACC	+10	-12,00%
COGS % of Revenues	+10	-30,20%

11.19. Kraft-Heinz's Scenario Analysis

	Financial Forecasts															
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**Continuing Value**
Scenario 1.																
Revenue growth	0,6%	1,8%	1,9%	4,3%	3,1%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%
(change in pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)
COGS as % of Revenues	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%	57,0%
(change in pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)
WACC	4,6%															
(change in pp)	(-0,2 pp)															
FCF	3319	4756	-1377	7629	3296	4454	4871	4967	5065	5165	5266	5370	5475	5582	5692	163000
ROIC	8,2%	8,1%	7,8%	7,9%	8,1%	8,0%	7,9%	7,9%	8,0%	8,0%	8,0%	8,0%	8,0%	8,0%	8,0%	8,0%
RONIC	-262,3%	2,8%	1,6%	-17,3%	6,4%	5,8%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%
Enterprise Value	**128515**															
change in Enterprise Value (%)	*15,4%*															
Equity Value	**81670**															
Equity Value Per Share	**$66,9**															
change in Equity Value per Share (%)	*26,5%*															
Scenario 2.																
Revenue growth	-0,4%	0,8%	0,9%	3,3%	2,1%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
(change in pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)
COGS as % of Revenues	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%	59,0%
(change in pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)
WACC	5,0%															
(change in pp)	(+0,2 pp)															
FCF	3575	4912	-1093	7607	3385	4468	4820	4864	4909	4955	5001	5047	5094	5141	5189	111652
ROIC	7,6%	7,4%	7,1%	7,2%	7,4%	7,3%	7,3%	7,3%	7,3%	7,3%	7,3%	7,3%	7,3%	7,3%	7,3%	7,3%
RONIC	-420,0%	-29,6%	0,8%	-9,0%	5,3%	3,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%
Enterprise Value	**98218**															
change in Enterprise Value (%)	*-11,8%*															
Equity Value	**51374**															
Equity Value Per Share	**$42,1**															
change in Equity Value per Share (%)	*-20,4%*															

11.20. Kimberly-Clark's Performance Drivers

	2010	2011	2012	2013	2014	2015	2016	2017
SoNOPLAT items (as % of Revenues)								
Cost of Revenues	62,7%	63,3%	64,1%	61,8%	61,7%	60,4%	59,6%	60,1%
Selling, General, and Administrative Expenses	18,6%	18,0%	19,3%	18,9%	18,8%	18,5%	18,3%	17,7%
Other Operating Expenses	0,5%	1,7%	0,0%	0,0%	2,3%	8,4%	0,0%	0,1%
EBITDA margin	**18,2%**	**16,9%**	**16,6%**	**19,3%**	**17,2%**	**12,7%**	**22,1%**	**22,0%**
Depreciation (as % of last year's NPPE)	9,8%	12,8%	10,6%	10,9%	11,1%	10,4%	10,2%	10,3%
Amortization (as % of last year's Net intang)	8,4%	8,4%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
EBIT Margin	**14,0%**	**11,7%**	**12,2%**	**14,8%**	**12,8%**	**8,7%**	**18,2%**	**18,1%**
Operating cash taxes (as % of EBIT)	31,9%	27,3%	34,2%	63,2%	23,9%	33,4%	23,7%	26,7%
NOPLAT	**9,6%**	**8,5%**	**8,0%**	**5,5%**	**9,7%**	**5,8%**	**13,9%**	**13,2%**
SoIC items (as % of Revenues)								
OPERATING WORKING CAPITAL								
Inventories (as % of COGS)	18,0%	16,5%	17,6%	17,2%	14,5%	16,0%	14,5%	15,3%
Receivables	12,5%	12,5%	13,6%	13,0%	11,3%	12,3%	12,0%	12,7%
Working Cash	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Other Current Assets	0,0%	2,7%	2,5%	3,7%	3,3%	3,3%	1,9%	2,7%
Total current assets	26,5%	28,5%	30,2%	30,1%	26,2%	27,9%	25,0%	27,2%
Accounts payable (as % of COGS)	16,7%	16,7%	18,3%	20,1%	20,1%	21,8%	22,6%	24,2%
Other current liabilities	0,0%	0,0%	7,5%	6,4%	6,2%	5,5%	2,0%	1,6%
Accrued Expenses	10,2%	9,7%	4,1%	4,1%	3,8%	3,9%	7,5%	7,6%
Current Liabilities related to Derivatives	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,2%	0,2%
Total current liabilities	21,4%	21,2%	24,1%	23,8%	23,3%	23,5%	24,1%	25,0%
FIXED ASSETS CAPITAL								
Net PPE	42,3%	38,6%	40,6%	39,6%	36,4%	37,3%	38,5%	39,8%
Other assets, net of other liabilities	2,5%	-1,5%	-0,1%	1,4%	1,5%	0,8%	1,0%	2,2%
OPERATING INTANGIBLE ASSETS								
Net Intangible Assets	1,5%	1,3%	1,3%	1,2%	0,6%	0,5%	0,5%	0,0%

11.21. Kimberly-Clark's Forecasted Statement of NOPLAT

Forecasted Statement of NOPLAT - $ Million	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Description															
Net sales	**18556**	**19032**	**19827**	**20533**	**21118**	**21677**	**22251**	**22841**	**23446**	**24067**	**24704**	**25358**	**26030**	**26719**	**27427**
(-) COGS	11453	11747	12237	12673	13034	13379	13734	14097	14471	14854	15248	15651	16066	16491	16928
(-) Selling, General, and Administrative Expenses	3435	3523	3670	3801	3909	4013	4119	4228	4340	4455	4573	4694	4819	4946	5077
(-) Other operating expenses	306	314	327	339	348	358	367	377	387	397	407	418	429	441	452
EBITDA	**3362**	**3448**	**3592**	**3720**	**3826**	**3928**	**4032**	**4138**	**4248**	**4360**	**4476**	**4594**	**4716**	**4841**	**4969**
(-) Depreciation	782	782	802	836	866	890	914	938	963	988	1014	1041	1069	1097	1126
(-) Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EBIT	**2580**	**2666**	**2790**	**2884**	**2961**	**3037**	**3118**	**3200**	**3285**	**3372**	**3461**	**3553**	**3647**	**3744**	**3843**
(-) Operating cash taxes	852	881	922	953	978	1003	1030	1057	1085	1114	1143	1174	1205	1237	1269
NOPLAT	**1728**	**1785**	**1868**	**1932**	**1983**	**2034**	**2088**	**2143**	**2200**	**2258**	**2318**	**2380**	**2443**	**2507**	**2574**
Reconciliation with net income (from NOPLAT to Net Income)															
Interest Expense	-315	-286	-293	-306	-316	-325	-334	-342	-349	-357	-365	-374	-382	-391	-400
Interest Income	25	250	94	91	95	99	129	158	188	219	251	283	317	351	386
Other Non-Operating income	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-operational Taxes	106	13	72	78	80	82	75	67	59	50	42	33	24	15	5
Net Income	**1543**	**1762**	**1742**	**1795**	**1842**	**1890**	**1957**	**2027**	**2098**	**2170**	**2245**	**2322**	**2401**	**2482**	**2565**

11.22. Kimberly-Clark's Forecasted Statement of Invested Capital

Forecasted Stat. Of Invested Capital - $ Million	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPERATING WORKING CAPITAL															
Current assets	5135	5267	5487	5682	5844	5999	6158	6321	6488	6660	6836	7018	7203	7394	7590
Current liabilities	4124	4230	4406	4563	4693	4818	4945	5076	5211	5349	5490	5636	5785	5938	6095
Total	**1011**	**1037**	**1081**	**1119**	**1151**	**1181**	**1213**	**1245**	**1278**	**1312**	**1346**	**1382**	**1419**	**1456**	**1495**
FIXED ASSETS CAPITAL															
Net PPE	7263	7449	7761	8037	8266	8485	8710	8940	9177	9420	9670	9926	10188	10458	10735
Other assets, net of other liabilities	180	148	210	248	251	249	256	262	269	276	284	291	299	307	315
Total	**7443**	**7597**	**7970**	**8285**	**8517**	**8734**	**8965**	**9203**	**9446**	**9696**	**9953**	**10217**	**10487**	**10765**	**11050**
OPERATING INTANGIBLE ASSETS															
Net Intangible Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INVESTED CAPITAL WITHOUT GOODWILL	**8454**	**8634**	**9051**	**9404**	**9667**	**9915**	**10178**	**10447**	**10724**	**11008**	**11300**	**11599**	**11906**	**12221**	**12545**
Goodwill	1576	1576	1576	1576	1576	1576	1576	1576	1576	1576	1576	1576	1576	1576	1576
INVESTED CAPITAL WITH GOODWILL	**10030**	**10210**	**10627**	**10980**	**11243**	**11491**	**11754**	**12023**	**12300**	**12584**	**12876**	**13175**	**13482**	**13797**	**14121**
Excess Cash	6582	2488	2402	2505	2609	3400	4172	4965	5778	6613	7470	8349	9252	10179	11131
Non operating investments	417	428	446	461	475	487	500	513	527	541	555	570	585	600	616
TOTAL INVESTOR FUNDS	**17030**	**13126**	**13474**	**13946**	**14327**	**15379**	**16426**	**17501**	**18605**	**19738**	**20900**	**22094**	**23319**	**24577**	**25868**
Equity															
Common stock	473	473	473	473	473	473	473	473	473	473	473	473	473	473	473
Retained Earnings	7012	2192	1445	839	175	175	175	175	175	175	175	175	175	175	175
Starting retained earnings	6730	7012	2192	1445	839	175	175	175	175	175	175	175	175	175	175
(+) Net Income	1543	1762	1742	1795	1842	1890	1957	2027	2098	2170	2245	2322	2401	2482	2565
(-) Dividends	1261	6582	2488	2402	2505	1890	1957	2027	2098	2170	2245	2322	2401	2482	2565
Deferred Income Tax Liabilities, net of Assets	1071	1771	2502	3259	4035	4831	5649	6488	7350	8234	9141	10073	11030	12011	13019
Adjusted Equity	**8556**	**4435**	**4420**	**4570**	**4683**	**5480**	**6297**	**7137**	**7998**	**8882**	**9790**	**10722**	**11678**	**12660**	**13667**
Debt (interest bearing liabilities)															
Short-term Debt	1045	1072	1117	1157	1190	1221	1221	1221	1221	1221	1221	1221	1221	1221	1221
Long-Term debt	5744	5892	6138	6356	6538	6711	6888	7071	7258	7450	7648	7850	8058	8272	8491
Newly-Issued Debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pension Liabilities	1425	1462	1523	1577	1622	1665	1709	1754	1801	1848	1897	1948	1999	2052	2106
Non-Controlling Interests	259	265	276	286	294	302	310	318	327	335	344	353	363	372	382
Total Debt	**8474**	**8691**	**9054**	**9376**	**9643**	**9899**	**10129**	**10365**	**10607**	**10855**	**11111**	**11372**	**11641**	**11917**	**12201**
TOTAL INVESTOR FUNDS	**17030**	**13126**	**13474**	**13946**	**14327**	**15379**	**16426**	**17501**	**18605**	**19738**	**20900**	**22094**	**23319**	**24577**	**25868**

11.23. Kimberly-Clark's Forecasted Statement of Free Cash Flow

Forecasted Statement of FCF - $ Million	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Description															
NOPLAT	**1728**	**1785**	**1868**	**1932**	**1983**	**2034**	**2088**	**2143**	**2200**	**2258**	**2318**	**2380**	**2443**	**2507**	**2574**
(+) Depreciation	782	782	802	836	866	890	914	938	963	988	1014	1041	1069	1097	1126
(+) Amortization of Operational Intangibles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Cashflow	**2510**	**2568**	**2671**	**2767**	**2848**	**2924**	**3002**	**3081**	**3163**	**3247**	**3333**	**3421**	**3511**	**3604**	**3700**
Investment in Working Capital	615	26	43	38	32	30	31	32	33	34	35	36	37	38	39
Capex	782	968	1113	1112	1094	1109	1138	1169	1200	1231	1264	1297	1332	1367	1403
Investment in other non-current operating assets	-216	-32	62	38	2	-2	7	7	7	7	7	8	8	8	8
Investment in Intangible assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Investment	**1181**	**962**	**1219**	**1189**	**1129**	**1138**	**1176**	**1208**	**1240**	**1272**	**1306**	**1341**	**1376**	**1413**	**1450**
Free Cash Flow before Goodwill	**1328**	**1606**	**1452**	**1579**	**1719**	**1786**	**1825**	**1874**	**1923**	**1974**	**2027**	**2080**	**2135**	**2192**	**2250**
Investment in Goodwill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Free Cash Flow after	**1328**	**1606**	**1452**	**1579**	**1719**	**1786**	**1825**	**1874**	**1923**	**1974**	**2027**	**2080**	**2135**	**2192**	**2250**

11.24. Kimberly-Clark's Forecasted Performance Analysis

Performance Analysis - Key measures															
Revenue growth rate	1,6%	2,6%	4,2%	3,6%	2,8%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%
EBITDA Margin	18,1%	18,1%	18,1%	18,1%	18,1%	18,1%	18,1%	18,1%	18,1%	18,1%	18,1%	18,1%	18,1%	18,1%	18,1%
NOPLAT Margin	9,3%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%
ROIC without Goodwill	20,9%	20,9%	21,1%	20,9%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%
Interest Coverage Ratio	10,66	12,06	12,25	12,17	12,09	12,07	12,07	12,11	12,16	12,21	12,25	12,30	12,34	12,39	12,43
Debt-to-Equity	0,99	1,96	2,05	2,05	2,06	1,81	1,61	1,45	1,33	1,22	1,13	1,06	1,00	0,94	0,89

11.25. Kimberly-Clark's Cost of Capital

WACC calculation	
Description	
Risk free interest rate	2,98%
Market risk premium	6,1%
Levered Equity Beta	0,51
Levered cost of Equity	6,1%
Cost of Debt	4,2%
Marginal tax rate	36,1%
After-tax Cost of Debt	2,7%
Target Equity/Assets Value	78%
Target Debt/Assets Value	22%
WACC	**5,3%**

APV calculation	
Description	
Risk free interest rate	2,98%
Market risk premium	6,1%
Unlevered Equity Beta	0,43
Unlevered Cost of Equity	5,6%
Interest Tax shield discount factor	4,2%
Marginal tax rate	36,1%
Probability of Default	0,66%
Magnitude of Financial distress costs	30,0%

11.26. Kimberly-Clark's DCF/WACC Valuation

DCF Valuation Summary

Assumptions	
WACC	*5,3%*
Growth rate of NOPLAT in perpetuity	*2,6%*
Expected RONIC	*20,5%*

Year	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**Continuing Value**
Free Cash Flow	1328	1606	1452	1579	1719	1786	1825	1874	1923	1974	2027	2080	2135	2192	2250	73510
Discount factor	1,053	1,109	1,168	1,230	1,295	1,364	1,437	1,513	1,594	1,678	1,767	1,861	1,960	2,064	2,174	2,290
Discounted FCF	1261	1448	1243	1283	1327	1309	1270	1238	1207	1176	1147	1118	1089	1062	1035	32104
% of Total Value of Operations	*2,5%*	*2,9%*	*2,5%*	*2,6%*	*2,6%*	*2,6%*	*2,5%*	*2,5%*	*2,4%*	*2,3%*	*2,3%*	*2,2%*	*2,2%*	*2,1%*	*2,1%*	*63,8%*
Value of Operations	**50318**															
Value of Excess cash	251															
Value of Non-operational Investments	406															
Enterprise Value	**50975**															
Value of Debt	9968															
Equity Value	**41006**															
Number of Shares outstanding	343,33															
Value per share	**$119,4**															

11.27. Kimberly-Clark's APV Valuation

APV Valuation Summary

Assumptions	
Unlevered cost of equity	*5,6%*
Growth rate of NOPLAT in perpetuity	*2,6%*
Expected RONIC	*20,5%*
Discount rate for ITS	*4,2%*
Marginal tax rate	*36,1%*
Probability of Default	*0,66%*
Magnitude of Fin. Distress costs	*30,0%*

Year	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**Continuing Value**
Free Cash Flow	1328	1606	1452	1579	1719	1786	1825	1874	1923	1974	2027	2080	2135	2192	2250	66590
Discount factor	1,056	1,115	1,177	1,243	1,313	1,386	1,464	1,545	1,632	1,723	1,819	1,921	2,028	2,142	2,262	2,388
Discounted FCF	1258	1440	1233	1270	1310	1289	1247	1213	1179	1146	1114	1083	1053	1023	995	27885
% of Total Value of Operations	*2,8%*	*3,1%*	*2,7%*	*2,8%*	*2,9%*	*2,8%*	*2,7%*	*2,7%*	*2,6%*	*2,5%*	*2,4%*	*2,4%*	*2,3%*	*2,2%*	*2,2%*	*61,0%*
Value of Operations	**45737**															
Interest expenses	315	286	293	306	316	325	334	342	349	357	365	374	382	391	400	
Marginal tax rate	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	
Interest Tax Shield	114	103	106	110	114	118	121	123	126	129	132	135	138	141	144	9518
Discount factor	1,042	1,085	1,130	1,177	1,226	1,277	1,331	1,386	1,444	1,504	1,567	1,632	1,700	1,771	1,844	1,921
Discounted Interest Tax Shield	109	95	94	94	93	92	91	89	87	86	84	83	81	80	78	4955
Present Value of Interest Tax Shields	6290															
Probability of default	0,66%															
Magnitude of Financial Distress costs	30,0%															
Expected Costs of Financial Distress	91															
Value of Financing side effects	**6200**															
Value of Excess cash	251															
Value of Non-operational Investments	406															
Enterprise Value	**52593**															
Value of Debt	9968															
Equity Value	**42625**															
Number of Shares outstanding	343,33															
Value per share	**$124,2**															

11.28. Kimberly-Clark's Comparables Valuation

Comparables Valuation Summary

Peer Group: Colgate-Palmolive
Unilever
Clorox
Edgewell

Company	Market Value of Equity	Enterprise Value	Net Income (2018)	EBITDA (2018)	EBIT (2018)	Multiples P/E	EV/EBIT	EV/EBITDA
Colgate-Palmolive	54799	60956	2773	4669	4174	19,8	14,6	13,1
Unilever	135205	156306	6269	10856	9501	21,6	16,5	14,4
Clorox	15635	17316	808	1296	1125	19,4	15,4	13,4
Edgewell	2310	3496	189	416	321	12,2	10,9	8,4
Mean						**20,2**	**15,5**	**13,6**
Median						**19,8**	**15,4**	**13,4**

EV/EBITDA	13,4	of Peer group
EBITDA	3362	of Kimberly-Clark in 2018
Enterprise Value	**44920**	
Value of Debt	9968	
Equity Value	**34951**	
Number of Shares outstanding	343	
Value per share	**$101,8**	

11.29. Kimberly-Clark's Sensitivity Analysis

Variable	Effect (%)	Impact on Valuation (%)
COGS % of Revenues	-10	53,90%
WACC	-10	23,90%
Growth rate of NOPLAT in perpetuity	+10	5,80%
Accs. Payable as % of COGS	+10	1,10%
RONIC in perpetuity	+10	0,90%
Inventories as % of COGS	-10	0,90%
Inventories as % of COGS	+10	-0,90%
RONIC in perpetuity	-10	-1,00%
Accs. Payable as % of COGS	-10	-1,10%
Growth rate of NOPLAT in perpetuity	-10	-4,90%
WACC	+10	-16,00%
COGS % of Revenues	+10	-53,30%

11.30. Kimberly-Clark's Scenario Analysis

	Financial Forecasts															
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**Continuing Value**
Scenario 1.																
Revenue growth	2,1%	3,1%	4,7%	4,1%	3,3%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%
change in pp	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)	(+0,5 pp)
COGS as % of Revenues	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%	60,7%
change in pp	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)	(-1 pp)
WACC	5,1%															
change in pp	(-0,2 pp)															
FCF	1 409	1 713	1 571	1 710	1 865	1 946	1 999	2 061	2 126	2 193	2 262	2 334	2 407	2 483	2 561	112452
ROIC	22,5%	22,5%	22,7%	22,5%	22,3%	22,3%	22,3%	22,3%	22,3%	22,3%	22,3%	22,3%	22,3%	22,3%	22,3%	22,3%
RONIC	-120,9%	31,6%	21,3%	19,6%	21,1%	22,2%	22,0%	22,0%	22,0%	22,0%	22,0%	22,0%	22,0%	22,0%	22,0%	22,0%
Enterprise Value	**65340**															
change in Enterprise Value (%)	*28,2%*															
Equity Value	**55371**															
Equity Value Per Share ($)	**$161,3**															
change in Equity Value per Share (%)	*35,0%*															
Scenario 2.																
Revenue growth	1,1%	2,1%	3,7%	3,1%	2,3%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%
change in pp	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)	(-0,5 pp)
COGS as % of Revenues	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%	62,7%
change in pp	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)	(+1 pp)
WACC	5,5%															
change in pp	(+0,2 pp)															
FCF	1253	1505	1342	1457	1585	1640	1668	1703	1740	1777	1816	1855	1894	1935	1977	47312
ROIC	19,4%	19,4%	19,6%	19,4%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%
RONIC	-240,3%	33,9%	18,6%	16,2%	17,7%	19,3%	19,1%	19,1%	19,1%	19,1%	19,1%	19,1%	19,1%	19,1%	19,1%	19,1%
Enterprise Value	**39239**															
change in Enterprise Value (%)	*-23,0%*															
Equity Value	**29270**															
Equity Value Per Share	**$85,3**															
change in Equity Value per Share (%)	*-28,6%*															

11.31. Revenue Synergies

Revenue synergies (Kraft-Heinz)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Revenues pre-acquisition	26248	26593	26976	28014	28752	29151	29556	29967	30383	30805	31233	31667	32107	32553	33005
Revenues post-acquisition	26300	26646	27030	28070	28810	29210	29616	30027	30444	30867	31296	31731	32171	32618	33071
Increased penetration in Emerging markets	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*
Additional shelf space through combined scale	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*
Revenue synergies (Kimberly-Clark)															
Revenues pre-acquisition	18556	19032	19827	20533	21118	21677	22251	22841	23446	24067	24704	25358	26030	26719	27427
Revenues post-acquisition	18575	19051	19847	20554	21139	21699	22274	22864	23469	24091	24729	25384	26056	26746	27455
Additional shelf space through combined scale	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*

11.32. Cost Synergies

	Acquisition				
	Ambev / Interbrew	Ambev-Interbrew / Anheuser-Busch	Kraft / Heinz	ABinBEV / SAB Miller	Average
Synergies in COGS					
Improvement per year	3,0%	3,6%	3,2%	1,2%	2,7%
Synergies in SG&A					
Improvement per year	3,0%	1,3%	11,3%	-1,2%	3,6%
Employee reductions					
Average reduction per year			-3,6%		-3,6%
Reducing number of plants					
Plants closed (%)			7,0%		7,0%
Investment in new facilities					
Investment made as % of past NPPE			207,1%		207,1%

11.33. Combined firm's Cost of Capital

APV calculation	Kraft-Heinz	Kimberly-Clark	Combined Company
Description			
Unlevered Cost of Equity	4,9%	5,6%	5,12%
Enterprise Value (from APV)	115919	52593	
Weight	68,8%	31,2%	
Interest Tax Shield discount factor			Each year's Cost of Debt
Interest Tax Shield discount factor (in perpetuity)			Last year's Cost of Debt
Marginal Tax Rate	36,1%	36,1%	36,1%
Probability of Default	7,54%	0,66%	36,80%
Magnitude of Financial Distress Costs	30,0%	30,0%	30,0%

11.34. Combined Company's Forecasted Statement of NOPLAT

Forecasted Statement of NOPLAT- $ Million	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Description															
Net sales	**44875**	**45697**	**46877**	**48624**	**49949**	**50909**	**51889**	**52891**	**53913**	**54958**	**56025**	**57114**	**58227**	**59364**	**60526**
(-) COGS	26130	26232	26536	27228	27675	28205	28739	29284	29840	30409	30989	31581	32186	32803	33434
(-) Selling, General, and Administrative Expenses	6252	6253	6310	6420	6475	6606	6740	6876	7016	7159	7305	7455	7608	7764	7924
(-) Other operating expenses	1111	1340	336	333	343	359	368	378	388	398	409	420	431	442	454
EBITDA	**11382**	**11872**	**13695**	**14643**	**15456**	**15739**	**16042**	**16352**	**16668**	**16991**	**17322**	**17659**	**18003**	**18355**	**18714**
(-) Depreciation	1728	2584	2602	2634	2706	2761	2801	2841	2883	2925	2969	3013	3058	3104	3151
(-) Amortization	272	270	270	270	270	270	270	270	270	270	270	270	270	270	270
EBIT	**9381**	**9019**	**10823**	**11738**	**12479**	**12708**	**12971**	**13240**	**13515**	**13796**	**14083**	**14376**	**14675**	**14981**	**15293**
(-) Operating cash taxes	2390	2271	2857	3126	3352	3418	3494	3572	3651	3732	3815	3900	3986	4075	4165
NOPLAT	**6992**	**6748**	**7966**	**8612**	**9128**	**9289**	**9477**	**9669**	**9864**	**10064**	**10268**	**10476**	**10689**	**10906**	**11127**
Reconciliation with net income (from NOPLAT to Net Income)															
Interest Expense	-8422	-8422	-3684	-3659	-3609	-3256	-3083	-2797	-2623	-2322	-2232	-2259	-2287	-2315	-2344
Interest Income	44	377	411	0	0	0	0	0	0	0	64	160	225	322	440
Other non-operating Income	-562	-633	-716	-725	-675	-706	-716	-726	-736	-746	-757	-767	-778	-789	-800
Non-operational Taxes	3059	2970	1365	1500	1466	1356	1300	1206	1150	1050	1001	981	972	952	925
Net Income	**1111**	**1039**	**5343**	**5728**	**6310**	**6683**	**6978**	**7351**	**7655**	**8046**	**8345**	**8591**	**8820**	**9075**	**9349**

11.35. Combined Company's Forecasted Statement of Invested Capital

Forecasted Stat. Of Invested Capital - $ Million	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
OPERATING WORKING CAPITAL															
Total current assets	10397	10555	10811	11196	11496	11650	11883	12121	12364	12613	12867	13127	13392	13663	13941
Total current liabilities	11305	11567	10710	10930	11166	11440	11653	11870	12092	12318	12549	12785	13025	13271	13522
Total	**-908**	**-1013**	**101**	**267**	**330**	**210**	**230**	**251**	**273**	**295**	**318**	**342**	**367**	**392**	**419**
FIXED ASSETS CAPITAL															
Net PPE	30177	29566	29093	28934	28636	28225	27821	27425	27037	26657	26285	25922	25567	25221	24884
Other assets, net of other liabilities	1678	1365	1265	1335	1412	1538	1563	1588	1613	1639	1665	1692	1719	1747	1775
Total	**31855**	**30931**	**30358**	**30269**	**30048**	**29763**	**29384**	**29013**	**28650**	**28296**	**27950**	**27613**	**27286**	**26967**	**26658**
OPERATING INTANGIBLE ASSETS															
Net Intangible Assets	60081	60670	67325	64881	67009	68289	69238	70199	71175	72163	73166	74182	75213	76258	77317
Total	**60081**	**60670**	**67325**	**64881**	**67009**	**68289**	**69238**	**70199**	**71175**	**72163**	**73166**	**74182**	**75213**	**76258**	**77317**
INVESTED CAPITAL WITHOUT GOODWILL	**91028**	**90589**	**97783**	**95417**	**97388**	**98262**	**98852**	**99463**	**100097**	**100754**	**101434**	**102138**	**102865**	**103617**	**104394**
Goodwill	46400	46400	46400	46400	46400	46400	46400	46400	46400	46400	46400	46400	46400	46400	46400
Goodwill created from Acquisition	41340	41340	41340	41340	41340	41340	41340	41340	41340	41340	41340	41340	41340	41340	41340
INVESTED CAPITAL WITH GOODWILL	**178768**	**178329**	**185524**	**183157**	**185128**	**186003**	**186592**	**187204**	**187838**	**188494**	**189174**	**189878**	**190606**	**191358**	**192135**
Excess Cash	12637	13791	0	0	0	0	0	0	0	2159	5368	7535	10791	14763	20085
Non-Operating Investments	417	428	446	462	475	488	501	514	527	541	556	570	586	601	617
Proceeds from sale of Plants	150	299	449	449	449	449	449	449	449	449	449	449	449	449	449
TOTAL INVESTOR FUNDS	**191973**	**192847**	**186419**	**184068**	**186052**	**186940**	**187542**	**188167**	**188814**	**191644**	**195547**	**198433**	**202431**	**207171**	**213286**
Equity															
Common stock	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261
Share capital of Kimberly-Clark	-8520	-2808	-3290	-4452	-5760	-7106	-8492	-9919	-11389	-12903	-14462	-16067	-17719	-19420	-21171
Ending Retained Earnings	16430	18774	7796	204	6514	6887	7182	7555	7858	8249	6390	3427	1489	204	204
Starting retained earnings	15319	18774	7796	204	204	204	204	204	204	204	204	204	204	204	204
(+) Net Income	1111	1039	5343	5728	6310	6683	6978	7351	7655	8046	8345	8591	8820	9075	9349
(-) Dividends	0	1039	5343	5728	0	0	0	0	0	0	2159	5368	7535	9075	9349
Paid-in Capital	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711	58711
Deferred Income Tax Liabilities, net of Assets	19286	24002	29226	34799	40630	46550	52576	58711	64957	71314	77786	84375	91083	97912	104864
Adjusted Equity	**86169**	**98940**	**92704**	**89522**	**100355**	**105303**	**110239**	**115319**	**120398**	**125633**	**128687**	**130707**	**133825**	**137668**	**142869**
Debt (interest bearing liabilities)															
Short-term Debt	4678	4752	4850	5034	5169	5256	5344	5434	5526	5619	5714	5811	5910	6011	6113
Long-Term debt	34157	34678	35339	36681	37661	38267	38883	39510	40148	40797	41458	42130	42814	43511	44219
New Debt (Investment-in-Plants-related Debt)	15045	15045	15045	15045	15045	15045	15045	15045	15045	15045	15045	15045	15045	15045	15045
Debt to finance the Acquisition	48439	35802	22011	0	0	0	0	0	0	0	0	0	0	0	0
Newly-Issued Debt	0	0	12418	33884	23920	18875	13751	8490	3240	0	0	0	0	0	0
Pension Liabilities	2910	3100	3374	3148	3113	3383	3451	3521	3592	3664	3738	3814	3892	3971	4052
Non-Controlling Interests	574	530	678	754	790	812	829	848	866	885	905	925	945	966	988
NCIs from Kimberly-Clark	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Debt	**105804**	**93907**	**93715**	**94546**	**85698**	**81637**	**77303**	**72848**	**68416**	**66011**	**66860**	**67725**	**68606**	**69504**	**70417**
TOTAL INVESTOR FUNDS	**191973**	**192847**	**186419**	**184068**	**186052**	**186940**	**187542**	**188167**	**188814**	**191644**	**195547**	**198433**	**202431**	**207171**	**213286**

11.36. Combined Company's Forecasted Statement of Free Cash Flow

Forecasted Statement of FCF - $ Million	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Description															
NOPLAT	**6992**	**6748**	**7966**	**8612**	**9128**	**9289**	**9477**	**9669**	**9864**	**10064**	**10268**	**10476**	**10689**	**10906**	**11127**
(+) Depreciation	1728	2584	2602	2634	2706	2761	2801	2841	2883	2925	2969	3013	3058	3104	3151
(+) Amortization of Operational Intangibles	272	270	270	270	270	270	270	270	270	270	270	270	270	270	270
Gross Cashflow	**8992**	**9601**	**10838**	**11517**	**12104**	**12320**	**12548**	**12780**	**13017**	**13259**	**13507**	**13759**	**14017**	**14280**	**14549**
Investment in Working Capital	152	-105	1113	166	63	-120	20	21	22	22	23	24	25	26	27
Capex	17499	1973	2128	2476	2409	2350	2397	2445	2495	2545	2597	2649	2703	2758	2815
Investment in other non-current operating assets	723	-313	-100	70	78	126	25	25	25	26	26	27	27	28	28
Investment in Intangible assets	784	859	6925	-2174	2398	1549	1219	1232	1245	1259	1272	1286	1301	1315	1329
Gross Investment	**19158**	**2414**	**10066**	**538**	**4947**	**3906**	**3660**	**3723**	**3787**	**3852**	**3919**	**3987**	**4056**	**4126**	**4199**
Free Cash Flow before Goodwill	**-10166**	**7187**	**772**	**10979**	**7157**	**8415**	**8888**	**9057**	**9230**	**9407**	**9588**	**9773**	**9961**	**10154**	**10350**
Investment in Goodwill	41340	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Free Cash Flow after Goodwill	**-51506**	**7187**	**772**	**10979**	**7157**	**8415**	**8888**	**9057**	**9230**	**9407**	**9588**	**9773**	**9961**	**10154**	**10350**

11.37. Combined Company's Forecasted Performance Analysis

Performance Analysis - Key measures															
Revenue growth rate	0,9%	1,8%	2,6%	3,7%	2,7%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	2,0%	2,0%
EBITDA Margin	25,4%	26,0%	29,2%	30,1%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%	30,9%
NOPLAT Margin	20,9%	19,7%	23,1%	24,1%	25,0%	25,0%	25,0%	25,0%	25,1%	25,1%	25,1%	25,2%	25,2%	25,2%	25,3%
ROIC without Goodwill	7,7%	7,4%	8,1%	9,0%	9,4%	9,5%	9,6%	9,7%	9,9%	10,0%	10,1%	10,3%	10,4%	10,5%	10,7%
Interest Coverage Ratio	1,35	1,41	3,72	4,00	4,28	4,83	5,20	5,85	6,35	7,32	7,76	7,82	7,87	7,93	7,98
Debt-to-Equity	1,23	0,95	1,01	1,06	0,85	0,78	0,70	0,63	0,57	0,53	0,52	0,52	0,51	0,50	0,49

11.38. Combined Company's Interest Coverage ratio, Credit Rating, Spread, and Probability of Default

Interest Coverage Ratios, Rating, Spread, and Probability of Default															
Interest coverage ratio	1,35	1,41	3,72	4,00	4,28	4,83	5,20	5,85	6,35	7,32	7,76	7,82	7,87	7,93	7,98
Implied Rating	B-	B-	A-	A-	A	A	A	A+	A+	AA	AA	AA	AA	AA	AA
Spread over the risk-free rate	5,25%	5,25%	1,10%	1,10%	1,00%	1,00%	1,00%	0,85%	0,85%	0,65%	0,65%	0,65%	0,65%	0,65%	0,65%
Cost of Debt	8,23%	8,23%	4,08%	4,08%	3,98%	3,98%	3,98%	3,83%	3,83%	3,63%	3,63%	3,63%	3,63%	3,63%	3,63%
Probability of Default	36,8%	36,8%	2,5%	2,5%	0,7%	0,7%	0,7%	0,6%	0,6%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%

11.39. Combined Company's APV Valuation

APV Valuation Summary

Assumptions	
Unlevered Cost of Equity	*5,12%*
Growth rate of NOPLAT in perpetuity	*2,0%*
Expected RONIC	*28,5%*
Discount rate for ITS	*each year's Kd*
Discount rate for ITS (in perpetuity)	*3,63%*
Marginal Tax Rate	*36,1%*
Probability of Default	*36,80%*
Magnitude of Fin. Distress costs	*30,0%*

Year	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**Continuing Value**
Free Cash Flow	-51506	7187	772	10979	7157	8415	8888	9057	9230	9407	9588	9773	9961	10154	10350	310884
Discount factor	1,051	1,105	1,162	1,221	1,284	1,350	1,419	1,491	1,568	1,648	1,733	1,821	1,915	2,013	2,116	2,224
Discounted FCF	-48996	6503	664	8990	5574	6235	6264	6073	5887	5708	5534	5365	5202	5044	4891	139756
% of Total Value of Operations	*-29,0%*	*3,9%*	*0,4%*	*5,3%*	*3,3%*	*3,7%*	*3,7%*	*3,6%*	*3,5%*	*3,4%*	*3,3%*	*3,2%*	*3,1%*	*3,0%*	*2,9%*	*82,8%*
Value of Operations	**168695**															
Interest expenses	-8422	-8422	-3684	-3659	-3609	-3256	-3083	-2797	-2623	-2322	-2232	-2259	-2287	-2315	-2344	
Marginal tax rate	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	36,1%	
Interest Tax Shield	3040	3040	1330	1321	1303	1176	1113	1010	947	838	806	816	826	836	846	52959
Discount factor	1,082	1,171	1,127	1,174	1,216	1,264	1,314	1,351	1,403	1,429	1,480	1,534	1,590	1,648	1,707	1,769
Discounted Interest Tax Shield	2809	2595	1180	1126	1072	930	847	748	675	587	544	532	519	507	496	29935
Present Value of Interest Tax Shields	45101															
Probability of default	36,80%															
Magnitude of Financial Distress costs	30,0%															
Expected Costs of Financial Distress	18624															
Value of Financing side effects	**26477**															
Value of Excess cash	1708															
Non-Operating Investments	406															
Proceeds from sale of Plants	150															
Enterprise Value	**197436**															
(-) Enterprise Value of Kraft-Heinz	115919															
(-) Enterprise Value of Kimberly-Clark	52593															
Value created by Synergies	**28923**															

11.40. Synergies Sensitivity Analysis

Variable	Effect (%)	Impact on Valuation (%)
Synergies in COGS (Kimberly-Clark)	10	7,87%
Synergies in SG&A (Kimberly-Clark)	10	3,04%
Employee reductions (Kimberly-Clark)	10	1,17%
Closing of plants (Kimberly-Clark)	10	0,35%
Additional shelf space through combined scale (both)	10	0,05%
Increased penetration in Emerging markets (Kraft-Heinz)	10	0,03%
Increased penetration in Emerging markets (Kraft-Heinz)	-10	-0,03%
Additional shelf space through combined scale (both)	-10	-0,05%
Closing of plants (Kimberly-Clark)	-10	-0,35%
Employee reductions (Kimberly-Clark)	-10	-1,19%
Synergies in SG&A (Kimberly-Clark)	-10	-3,05%
Synergies in COGS (Kimberly-Clark)	-10	-8,03%

11.41. Relationship between Interest Coverage ratio, Credit Rating, Spread, and Probability of Default

Interest Coverage Ratios, Rating, Spread, and Probability of Default

Interest Coverage Ratio (greater than)	Rating	Spread	Probability of Default
8,5	AAA	0,50%	0,70%
6,5	AA	0,65%	0,51%
5,5	A+	0,85%	0,60%
4,25	A	1,00%	0,66%
3	A-	1,10%	2,50%
2,5	BBB	1,60%	7,54%
2	BB	3,35%	10,00%
1,75	B+	3,75%	16,63%
1,5	B	5,00%	25,00%
1,25	B-	5,25%	36,80%
0,8	CCC	8,00%	45,00%
0,65	CC	10,00%	59,01%
0,2	C	12,00%	70,00%
0	D	14,00%	100%

11.42. Purchase Price Allocation

Purchase Price Allocation - $ Million	
Book Value of Kimberly-Clark's Equity	8556
Hidden reserves	0
Revalued Equity of Kimberly-Clark	8556
NCIs created by the Acquisition	0
Total Consideration paid	49897
Goodwill created by the Acquisition	41340

11.43. Synergies Scenario Analysis

	Financial Forecasts														
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
Scenario 1.															
Kraft-Heinz															
Increased penetration in Emerging markets	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%
Additional shelf space through combined scale	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%
Kimberly-Clark															
Additional shelf space through combined scale	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%	0,11%
COGS as % of Revenues	59,9%	58,1%	56,3%	54,6%	53,0%	53,0%	53,0%	53,0%	53,0%	53,0%	53,0%	53,0%	53,0%	53,0%	53,0%
SG&A as % of Revenues	17,8%	17,1%	16,4%	15,7%	15,1%	15,1%	15,1%	15,1%	15,1%	15,1%	15,1%	15,1%	15,1%	15,1%	15,1%
Number of Employees	40349	38764	38764	38764	38764	38764	38764	38764	38764	38764	38764	38764	38764	38764	38764
Number of Plants	91	88	85	85	85	85	85	85	85	85	85	85	85	85	85
Value created by synergies	**32525**														
change (%)	*12,5%*														
Premium to pay	45,9%														
Scenario 2.															
Kraft-Heinz															
Increased penetration in Emerging markets	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%
Additional shelf space through combined scale	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%
Kimberly-Clark															
Additional shelf space through combined scale	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%	0,09%
COGS as % of Revenues	60,2%	58,7%	57,3%	55,9%	54,5%	54,5%	54,5%	54,5%	54,5%	54,5%	54,5%	54,5%	54,5%	54,5%	54,5%
SG&A as % of Revenues	17,9%	17,3%	16,8%	16,2%	15,7%	15,7%	15,7%	15,7%	15,7%	15,7%	15,7%	15,7%	15,7%	15,7%	15,7%
Number of Employees	40652	39347	39347	39347	39347	39347	39347	39347	39347	39347	39347	39347	39347	39347	39347
Number of Plants	91	90	89	89	89	89	89	89	89	89	89	89	89	89	89
Value created by synergies	**25237**														
change (%)	*-12,7%*														
Premium to pay	35,6%														

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